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Recd & filed in N. S. Dist. Clerk's office at Detroit
Feb. 25. 1858. *Wm. D. Cochran. Clerk.*

AGRICULTURAL BOOK-KEEPING:

BEING A

CONCISE AND SCIENTIFIC SYSTEM

OF

KEEPING FARM ACCOUNTS,

DIVESTED OF

ALL TECHNICAL TERMS, AND ACCOMPANIED WITH BLANK BOOKS
RULED AND ADAPTED TO THE SYSTEM.

1831
BY WM. D. COCHRAN,

LATE PRINCIPAL OF COCHRAN'S COMMERCIAL INSTITUTE.

DETROIT:

DAILY ADVERTISER STEAM PRESSES, 212 JEFFERSON AVENUE.

1858.

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Entered according to Act of Congress, in the year 1857,

BY W. D. COCHRAN,

In the Clerk's Office of the District Court of the United States, for the District of Michigan.

DEDICATED

TO

HONORABLE KINSLEY S. BINGHAM,

THE FORMER GOVERNOR, UNDER WHOSE ADMINISTRATION MICHIGAN HAS TAKEN A STEP IN ADVANCE

OF HER SISTER STATES, IN UNITING SCIENCE AND LABOR, BY THE ESTABLISHMENT OF

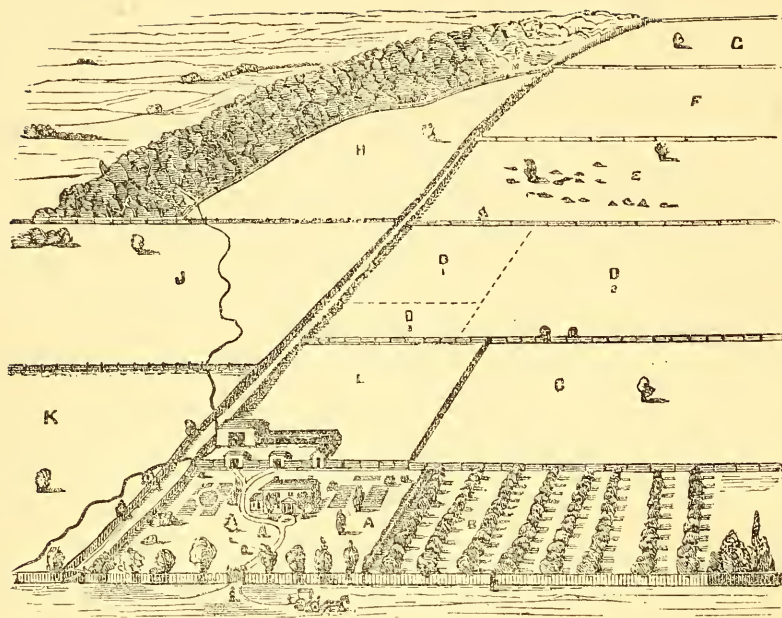
THE AGRICULTURAL COLLEGE, SO AUSPICIOUSLY OPENED AT LANSING.

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PLOT OF MAPLE GROVE FARM.

The Farm here presented, is according to Inventory on the 1st April, divided as follows :

- | | |
|---|--|
| <p>A—The garden.</p> <p>B—The orchard</p> <p>C—A field of 12 acres, which has been sowed with barley.</p> <p>D—A field of 14 acres designed for three crops, as follows: D No. 1, is three acres for potatoes; D No. 2, is ten acres, for corn; D No. 3, is one acre, for turnips.</p> <p>E—A pasture lot of 16 acres.</p> <p>F—A meadow of 16 acres.</p> | <p>G—A fallow of 16 acres, on which chopping and fencing has to be done, and is to be broken up for wheat.</p> <p>H—A field of 16 acres, seeded with wheat last fall.</p> <p>J—A field of 16 acres, designed to be sowed with oats, and seeded down.</p> <p>K—A meadow of 12 acres.</p> <p>L—A colt and hog pasture of 3 acres, with moveable fence.</p> <p>M—A wood lot of 30 acres, in which the young stock feed.</p> |
|---|--|

THE FAMILY CONSISTS OF—

- | | |
|--|--|
| <p>James Earl, the farmer.</p> <p>Mary Earl, his wife.</p> <p>Charles Earl, a son of 18 years.</p> <p>Jane Earl, a daughter of 15 years.</p> | <p>Ann Earl, a daughter of 9 years.</p> <p>Edward Earl, a son of 3 years.</p> <p>Thos. Jones, hired for a year, at \$14 per month.</p> <p>Jane Holden, hired for house work, \$4 per mo.</p> |
|--|--|

The above plate gives Maple Grove Farm in perspective. The farmer will merely draw a plot of square fields in the page designed for it in the blanks.

INTRODUCTION.

Among the many methods of Book Keeping now before the public, there exists no entire system, adapted to the wants of the Agriculturist, in which are arranged and classified the various and complex accounts of the farm. This fact suggested the preparation of the following work.

At first I merely proposed presenting it to the Michigan Agricultural College, as an expression of interest in the attempt there being made, to unite Science with Labor. But in accordance with a wish very generally expressed by farmers both in Michigan and New York, it has taken its present form.

Had it been my object to present a scientific arrangement, commending itself to the professional accountant, the task had been comparatively easy, but practical utility would not have been attained, as few of those for whom it was designed would have taken the trouble to master its details. But while sacrificing nothing of a perfect system, my endeavor has been to avoid all the formulas of the Counting Room, and present the subject in such manner as that every farmer may be able to know the results of his labor with the particulars contributing thereto, and I believe that in no business, presenting so many sources of profit and loss, can a more complete classification of accounts be found, or more accurate results obtained, than in the system here presented to the Agriculturist.

The general design of the work is, to enable the farmer to arrive at accurate data for calculation as to his labor, so that his energies may be intelligently directed. To this end, each field is charged with its cost and labor, and credited with its proceeds, and the result, whether gain or loss; and also, the comparative profit of the different crops may thus be definitely ascertained, and, in a succession of years, the adaptation of different soils to particular crops, be made apparent. So also, in regard to the different Teams used, and various stock kept upon the farm.

The features peculiar to this system are, the Time Table for labor and team work—the Produce Account—the simple and direct manner of making day-book entries, answering all the purpose of a Journal—the manner of posting—the method of charging the various descriptions of stock at the close of the month—the manner of balancing, and the column for Temperature and the state of the weather, which, in a succession of years, will afford valuable data for calculation in regard to seeding, cultivating and harvesting, and aid in reducing to a science, the business of Agriculture.

The Produce Account in the Ledger is worthy of particular attention, and were I to select any one, as being of especial utility, it should be this, and those farmers who may not care to adopt the entire system, would be amply rewarded by keeping this single account.

The abstract forms used in balancing, presented the greatest obstacle to accomplishing the idea of the work. This difficulty has been overcome and simplicity attained, by connecting the Profit and Loss and general Inventory of avails and liabilities with the actual details from which they arise, and a way has thus been opened for a clear understanding of this (to the uninitiated) most complex part of Book Keeping.

The general system of accounts, is presented with such variety of examples as will enable each individual to adapt the system to the particular circumstances of his own farm, however much his crops, stock, &c., may differ from those presented in the work before him, and in like manner the accompanying Blanks may be made to accommodate every variety of farming accounts.

In commending this work to the patronage of the public, I would say, that by its use the farmer will be greatly benefitted, and the science of Agriculture advanced.

Productive interests are frequently conducted to advantage in one direction, and disadvantage in another, without any distinct recognition of profit in the one case or loss in the other, but though mistakes and errors may be dismissed from the memory as unwelcome guests, they cannot thus be erased from the pages of a well-kept record, but will stand there as beacons of warning and reproof. Besides, the very act of intelligently directing the mind to the keeping of accounts will educate the understanding and prepare for engaging in other and more extended business, if such should, at any time, be demanded, and I hazard nothing in asserting that a young man taking this method and following it out in the practical affairs of the farm, will thereby obtain a better acquaintance with business, than is generally gained in a course of three months' attendance at an educational institution, at an expenditure of \$80.

Furthermore, I would say, should this work be introduced throughout our Common Schools, and thus brought into general use, it will afford data for obtaining an accurate knowledge of the productions of our country, and at a much less cost than is now incurred, whereas the reports of these productions have hitherto been mainly the results of the careless guesses of the farmer, and the doubtful judgment of the census-taker.

In conclusion, should this book contribute to the intelligence of the farmer, and the consequent elevation of the industrial interests of community, the idea of a life time will have been, in some degree, realized

DETROIT DEC. 24, 1857.

W. D. C.

TO THE FARMER.

Scientific Book Keeping has heretofore been so complex in its details, as necessarily to be confined to those long accustomed to the practical duties of the Counting Room, or who have received a special education in a Commercial Institution. In the system here presented to the Agriculturist, I profess to bring it within the reach of any man of common sense, who will take ordinary pains to understand the accompanying explanations; but it is too much to expect that a mere cursory glance at them, will be sufficient to ensure a thorough comprehension of the method.

The Accounts of the farmer are more complex in their nature, than those of the merchant; for the Book Keeping of the merchant consists, chiefly, of accounts with individuals; while that of the farmer has to do with fields, various descriptions of crops, teams, dairy, and all kinds of stock—without a knowledge of the cost and productions of which, his accounts would be valueless, so far as the intelligent direction of his labor and capital are concerned. I would, therefore, particularly impress upon your mind, the necessity of giving especial attention to each of the explanations here given, and of comparing them with the examples, so that they become familiar and of ready application.

With this attention, your Book Keeping, even under all the disadvantages of inexperience, can occupy but very little of your time.

The plot of the farm being drawn, and Time Table headed in accordance with a general Inventory taken, your transactions (except those of labor and team work, which, through the use of the time table, will occupy but a few moments of each evening) are few in number, and cannot occupy more than an odd half hour in recording them once or twice a week. At the close of the month, two or three evenings may be occupied in disposing of the entries made at this time, adding up and computing the value of the labor in the Time Table, and posting the whole.

Your Books can be opened at any period during the year, but the most convenient time will be March, April or May, or in the fall of the year, after the harvesting of the crops.

GENERAL EXPLANATIONS.

It may be necessary, before proceeding to the details of the respective accounts, to consider the general principle of exchange that pertains to every business transaction, and which requires to be noted in any account kept concerning it.

Exchange, supposes a value received for a value given, and this *value for value* is the never-failing law, the strict observance of which, in any particular account, or system of accounts, will invariably secure correct results.

Thus, to know the profit and loss of any crop, or kind of stock, an account must be kept not only with the proceeds realized therefrom, but also, the cost of raising the crop and of keeping the stock, as the difference between *these values* gives the required result.

In all cases, then, the thing, for which value is in any form expended, and that which is expended for it, must both be considered and clearly stated. The first of these is debtor; the second is creditor. The rule for Debtor and Creditor is this: That which we *receive*, or which *costs*, or on which labor or value, in any form, has been expended, is Debtor. That which *produces*, or is *paid out*, or in any way expended, is Creditor.

If labor is done in any field, the field *costs*, and is debtor—while labor *is expended*, and is creditor. The team is fed, and *costs* hay or grain, and is debtor; and grain or hay account *produces*, and is creditor. Cash is received for stock—the cash *costs*, and is debtor, because we dispose of stock for it; and the stock is creditor, because it *produces* the cash.

Thus, it will be perceived, that in these cases, an account is kept with the field, the team and the cash, which are *debtors, because they cost*, and also, with labor, grain and stock which are *creditors, because they produce*.

This principle applied in the statement of business transactions, constitutes the whole of double entry Book Keeping, and must commend itself to the common sense of every man.

BOOKS USED.

DAY BOOK.—The book into which is entered the transactions of the day, with such a narrative of them as may be necessary to a perfect understanding of the same.

TIME TABLE.—Auxiliary to, and bound with the Day Book, presenting the Labor and Team work of each day, and general description of the work performed, with the temperature and state of the weather.

LEDGER.—The book into which all accounts are carried from the Day Book and Time Table, and so arranged as to present each one in its relation of Debtor and Creditor.

ABBREVIATIONS AND TERMS.

ACCOUNT.—A term used to signify a record of debits and credits pertaining to any person or thing.

DEBTOR.—That which we receive, or *whatever costs*; also, the person to whom we sell on credit, or who becomes indebted on account. The debtor is always placed at the left hand.

CREDITOR.—That which is paid out, or *which produces*; also, the person who gives us value on credit, or on account. The creditor is always placed at the right hand.

POSTING.—Carrying respective accounts from the Day Book into the Ledger.

Accts., : : : Accounts.	Bot., : : : Bought.
Bush., : : : Bushels.	Dr., : : : Debtor.
lb., : : : Pounds.	Cr., : : : Creditor.
Bbbs., : : : Barrels.	ea., : : : Each.
a., : : : at.	Rec., : : : Receivable.
Prod., : : : Produce.	Pay., : : : Payable.
Gen. Ex., : General Expense.	Pota., : : : Potatoes.
Doz., : : : Dozen.	Int., : : : Interest.
Amt., : : : Amount.	Inv., : : : Inventory.

ACCOUNTS DESCRIBED.

INVENTORY.—Is a general statement of the whole property of the farmer, consisting of the Farm, Stock, Implements, Grain, Crops in the ground, Notes or Mortgages, and debts due to him on open account—these are his *assets*. Also, a statement of all he owes upon notes or open account—these last are his *liabilities*—the difference between them is his *net worth*.

PROFIT AND LOSS.—That account which shows the Gain and Loss on property accounts. More particularly explained in the Ledger.

BALANCE.—Presents the general Inventory of property in closing accounts.

INTEREST.—That account into which all money paid or received for the use of money is carried. This account is also credited with interest on the value of Real Estate and Stock.

JAMES EARL.—The farmer who is made creditor for all avails, as above described, and debtor for all liabilities.

REAL ESTATE.—The general term for landed property—in this work, it signifies the farm of James Earl.

FIELDS.—These accounts are debited with the labor, manure and seed expended upon them, and credited with their crops.

HORSE TEAM. } The working teams of the farm—they are Debited with
OX TEAM. } their value as per inventory, and credited with their labor.

DAIRY.—The cows—debited with value, feed and care, and credited with what they produce.

YOUNG STOCK. } Debited with their value, feed and care, and credited
SHEEP. } with what they produce.
HOGS. }
POULTRY. }

IMPLEMENTS.—Embracing wagons, harness, ploughs, cradles, and all other tools, as spades, hoes, &c.—this account is debited with the cost of these and repairs.

PRODUCE ACCOUNT No. 1.—This account is debited with the estimated value of all grain, hay and fodder, when harvested or threshed out, and credited with the same when sold or otherwise disposed of.

PRODUCE ACCOUNT No. 2.—In which roots, fruits and garden stuffs are entered, in like manner as above. A more particular explanation of these accounts will be given at the opening of the Ledger.

FEED ACCOUNT.—An account opened for mill feed used for the stock.

PERSONAL ACCOUNTS.—All accounts opened with individuals, whether as debtors or creditors.

CASH.—The name of the account which is debited with all money received, and credited with all money paid out.

BILLS RECEIVABLE.—All notes made payable, or passed over to us, and all mortgages which we hold.

BILLS PAYABLE.—All notes which we give as promises to pay, and all mortgages.

FAMILY ACCOUNT.—This is debited with all the expenses of the family, as food and clothing, and credited with the labor of its members, and the board of hired hands.

FURNITURE ACCOUNT.—Embraces all the furniture of the house.

LABOR ACCOUNT.—Is debited with all that *is paid for labor* performed upon the farm, and credited from the Time Book *with the labor*; the difference between the debtor and creditor sides will show what portion of the labor has been done by the family, and is credited to that account.

GENERAL EXPENSE.—An account into which all expense which is not classed under any particular head, is carried.

APRIL 1ST, 1857.

In like manner, if the farmer owes for Bills Payable, (notes he has given,) or to persons on account, he has *received* value, and is debtor, while Bills Payable and the persons are creditors. These are his Liabilities.

LEDGER PAGE.	<i>James Earl's Avals are—</i>									
1	REAL ESTATE—Consisting of the following, as given in the plot of the farm :									
	House and Lawn—	1½	acre,	-	-	-	-	-	1350	00
	Barns, Sheds, &c—	1	"	-	-	-	-	-	560	00
	Garden A,	1	acre,	-	-	-	-	-	100	00
	Orchard B,	5½	"	-	-	-	-	-	330	00
	Field C,	10	"	-	-	-	-	-	200	00
	" D,	14	"	-	-	-	-	-	280	00
	" E,	16	"	-	-	-	-	-	320	00
	" F,	16	"	-	-	-	-	-	288	00
	" G,	16	"	-	-	-	-	-	256	00
	" H,	16	"	-	-	-	-	-	320	00
	" J,	16	"	-	-	-	-	-	320	00
	" K,	12	"	-	-	-	-	-	308	00
	" L,	3	"	with movable fence,				-	66	00
	" M,	30	"	wood lot,				-	390	00
	GROWING CROPS AND FIELDS PREPARING FOR CROPS.									
14	FIELD H.—Sowed with Wheat, - - -									
12	FIELD C.—Sowed with Barley, - - -									
	<i>Amount carried to page 14,</i>									

LEDGER PAGE.	Amount brought from page 13,		
12	FIELD D, No. 1.—60 loads Manure, and plowing for Potatoes, in March, - - -		5250 30
10	FIELD D, No. 2.—200 loads Manure, - - -		21 00
9	HORSE TEAM ACCOUNT.—4 Horses, - - -		72 00
10	DAIRY ACCOUNT.—9 Cows, - - -		390
1	YOUNG STOCK ACCOUNT—		315
	2 three year old Steers, - - -	78 00	
	5 two year old Heifer and Steers, - - -	70 00	
	4 year old " " - - -	28 00	176 00
11	SHEEP ACCOUNT.—20, - - -		55 00
11	HOG ACCOUNT—		
	8 Store Hogs, - - -	48 00	
	Sow and Pigs, - - -	18 00	
	Sow, - - -	10 00	76 00
10	POULTRY ACCOUNT—		
	52 Fowls, - - -	13 00	
	4 Turkeys, - - -	5 00	18 00
5	PRODUCE ACCOUNT No. 1— <small>In this Grain and Hay are entered.</small>		
	16 bushels Wheat, a \$1 25, - - -	20 00	
	124 " Corn, a 50, - - -	62 00	
	100 " Oats, a 40, - - -	40 00	
	6½ tons Hay, a 8 50, - - -	55 25	
	Fodder, - - -	7 50	184 75
7	PRODUCE ACCOUNT No. 2— <small>In this Roots and Fruits are entered.</small>		
	22 bushels Apples, a 75, - - -	16 50	
	65 " Potatoes, a 75, - - -	48 75	
	30 " Turnips, a 14, - - -	4 90	70 00
6	FEED ACCOUNT.—1500 lbs., a \$15 per ton, -		11 25
1	Implements as per list of the same, - - -		515 00
4	MANURE ACCOUNT.—150 loads a 15c., - - -		22 50
1	FURNITURE ACCOUNT.—Mary Earl's statement, -		432 00
3	FAMILY ACCOUNT—Groceries and Provisions, -		83 00
2	CASH.—Amount on hand, - - -		92 00
2	BILLS RECEIVABLE—		
	A mortgage by L. Barns, October 16, 1854, This mortgage is payable in four yearly instalments, from 1857. Interest 7 per cent.	300 00	
	A mortgage by S. Baker, January 26, 1857, This mortgage is payable in five yearly instalments from 1858. Interest at 7 per cent.	500 00	800 00
4	Thos. Arnold owes on account, - - -		50 00
1			<u>8536 30</u>
4	<i>James Earl's Liabilities are—</i>		
	Thos. Jones, balance due on acct., which he wishes to lie in my hands, - - -	50 00	
2	BILLS PAYABLE.—A note to Widow Marsh, dated March 15, 1855, which was given for her accommodation, - - -		
1		235 00	285 00

THE DAY BOOK.

The Day Book in this Work is so arranged as to answer the purpose of both Day Book and Journal, and is therefore divided into five spaces—the first for the Ledger Page—the second for the Debtors—the third for the Creditors and narratives of transactions—the fourth and fifth for Money Columns.

The Ledger page column, is to mark the number of the Page in the Ledger, into which the entry is posted, and is necessary for reference.

The second column is used for the Debtor or *that which costs*.

The third column contains the Creditor or *that which produces* and is placed as near to the Debtor as the narrative will permit, and should be understroked that it may be readily recognized in posting to the Ledger.

The first Money Column is used where two or more items are connected in the same transaction and are to be added and carried into the last column.

The last Money Column, contains the sum to be debited and also the amount to be credited—*these being always equal*.

In the first entries of the Day Book, the accounts are entered in the simplest manner possible—each Debtor having a single creditor and each creditor a single debtor, but in the progress of the work, cases like the following occur.

The Farmer has sold at market, Eggs and Butter and received cash for them—here the cash is received from two sources—*Poultry* and *Dairy* and the cash is debited with the whole *amount*, and the Poultry account credited with what the eggs produced and the Dairy account credited with what the butter produced—these two accounts combined *equal the debit to cash* and thus they are presented in a single entry. If the Farmer prefers it, such entries may be divided, and in accordance with examples given, Cash may be made debtor to Dairy in one entry—and cash made debtor to Poultry in another entry.

This subject being of importance is further referred to and explained in notes as the particular cases arise.

APRIL 8TH, 1857.

2	Cash, . . .	For the following, sold at Market this day:—			
10		From <i>Dairy Acct.</i> , 3 quarters of Veal, 45lbs. a 8	3 60		
		30 lbs. Butter, a25	7 50	11 10	
		..			
2	Cash, . . .	From <i>Poultry Acct.</i> , 25 doz. Eggs, a20		5 00	
10		..			
2	Cash, . . .	From <i>Produce Acct., No. 2</i> , 2 bbls. Apples, (5 bush.) a\$2 50	5 00		
7		10 bush. Potatoes, a\$1	10 00	15 00	
		..			
15	* Field K, .	Paid <i>Cash</i> to Ford & Co., for $\frac{1}{2}$ ton of Plaster, a\$7 50		3 75	
		..			
14	Field J, . .	Paid <i>Cash</i> to J. Anson, for $1\frac{3}{4}$ bush. Clover Seed, a\$6	10 50		
2		2 " Timothy " a\$2	4 00	14 50	
		..			
3	Family Account,	Paid <i>Cash</i> to J. Banks & Co. for Groceries,	5 75		
2		Clothing for the Children,	5 86	11 61	
		..			
		Designing to sell my Horse "Jerry," which I cannot work to advantage with the brood mare, I have bought of J. Andrews a yoke of Oxen, and paid cash and my note for the same. The transaction stands thus—			
9	† Ox Team, .	Paid <i>Cash</i> ,	60 00		
2		<i>Bills Payable</i> , (my note at 5 mos.,)	60 00	120 00	
		—24—			
3	Family Account,	Paid <i>Cash</i> , as follows :			
2		For Winter's School,	11 25		
		Educational Paper,	1 00		
		Agricultural Monthly,	1 00		
		Agricul. Chemistry for Charles,	1 25		
		Botany for Jane,	1 00		
		Book for Ann and toy for Eddy,	40	15 90	

* Plaster has been obtained to sow upon Field K, and *Cash* has been paid for it, consequently Ford & Co. have nothing to do in the record, except as it may be convenient to preserve the name for the sake of reference.

† Here are two kinds of payment made—one cash, the other a note. The first is posted to the credit of Cash account, the last to the credit of Bills Payable. The amount (in one entry) to the debit of Ox Team Account.

FORM OF THE NOTE.

\$60 00.

MAPLE GROVE, April 15th, 1857.

Five months after date, I promise to pay James Andrews, or order, Sixty Dollars, for value received,
with interest. JAMES EARL.

APRIL 24TH, 1857.

$\frac{14}{5}$	Field J, . . .	Seed from <i>Produce Acct.</i> , No. 1. 32 bushels Oats, a50			16 00
$\frac{2}{7}$	Cash, . . .	Sold from <i>Produce Acct.</i> , No. 2. 20 bush. Potatoes, a\$1 00 4 bbls. Apples, (10 bbls.) a\$3 00	20 00 12 00		32 00
9		Sold from <i>Horse Team Acct.</i> , Sold the Horse "Jerry," to J. Gould, for \$120, and have received in payment			
2	* Cash, . . .	For one half,	60 00		
2	Bills Receivable,	Gould's note at 5 months,	60 00		120 00
$\frac{3}{10}$	† Family Acc't,	Mary Earl's acct. for the month is, From <i>Dairy Acct.</i> , Milk, 100 25 lbs. Butter, a20 5 00 1 quarter, 16 lbs. Veal, a 7 1 12			7 12
$\frac{3}{10}$	Family Account,	From <i>Poultry Acct.</i> , 6 doz. Eggs, a18			1 08
$\frac{3}{7}$	Family Account,	From <i>Produce Acct.</i> , No. 2, 15 bush. Potatoes, reserved for summer use, a75 11 25 7 bushels Apples, a75 5 25			16 50
		—30—			
$\frac{9}{5}$	‡ Horse T'm Acct	Estimate of the feed of stock for the month. From <i>Produce Acct.</i> , No. 1, \$3000 lbs. Hay, a\$9 00 13 50 25 bush. Oats, a 40 10 00			23 50

* This transaction is of the same nature as in the purchase of the oxen, only the cases are reversed. Here, two things are to be debited—*Cash* and *Bills Receivable*, and Horse Team Account is to be credited with the whole amount. The form of the note is the same as in the preceding one, except that it is made payable to *James Earl*, by James Gould, instead of *bu James Earl* to John Andrews.

† At the close of the month, Mary Earl is supposed to give an account of Dairy, Poultry and Farm Produce, used in the family.

The above is given as a simple method of making this entry, but to those accustomed to Book Keeping, the following would be a preferable form:—

FAMILY ACCOUNT, Used for Family, as per Mary Earl's account for the month,				
From <i>Dairy Account</i> ,				
Milk,	\$1 00			
25 lbs. of Butter at 20 cts.	5 00			
1 quarter Veal, 16 lbs. at 7 cts.	1 12	7 12		
From <i>Poultry Account</i> ,				
6 dozen Eggs, at 18 cts.		1 08		
From <i>Produce Account</i> , No. 2,				
15 bush. Potatoes, put away for summer use, at 75c.	\$11 25			
7 " Apples at 75c.	5 25	16 50		24 70

‡ The Stock are debited with the estimated value of their keep for the month. As a general thing, the Farmer knows the quantity of feed his stock consumed, and the run of pasture can easily be kept. Whenever an estimate, can be made for several months, it had better be done, as young stock running in the same pasture for the summer or team and other stock during the winter months, when the feed is uniform. If the feed is varied, a memorandum can be kept, to ensure accuracy—but this will seldom, if ever, be necessary.

§ The weight of hay and feed is invariably given in pounds, as the most convenient form for Ledger entry—the price is given per ton.

APRIL 30TH, 1857.

$\frac{9}{5}$	Ox Team, . .	From <i>Produce Acct.</i> , No. 1, 700 lbs. Hay, a\$9 00 6 bushels Corn, a 55	3 15 3 30	6 45
$\frac{10}{5}$	Dairy Acct., .	From <i>Produce Acct.</i> , No. 1, 5500 lbs. Hay, a\$8 From <i>Feed Acct.</i> , 1000 lbs. Shorts and Bran, a\$15	22 00 7 50	29 50
$\frac{11}{5}$	Young Stock Acc	From <i>Produce Acct.</i> , No. 1, Fodder, From <i>Produce Acct.</i> , No. 2, 30 bush. Turnips, a14	7 50 4 20	11 70
$\frac{11}{5}$	Sheep Acct., .	From <i>Produce Acct.</i> , No. 1, 1000 lbs. Hay, a \$8 From <i>Feed Acct.</i> , 250 lbs. Shorts and Bran, a\$15	4 00 1 88	5 88
———— MAY 4TH. ————				
$\frac{3}{5}$	Family Account,	From <i>Produce Acct.</i> , No. 1, Ground at Mill for house use 12 bu. Wheat, a\$1 25 4 " Corn, a 60	15 00 2 40	17 40
7	Feed Account,	At the same time from above Acct. exchanged for 2000 lbs. Feed, 29½ bu. Corn, a60		17 70
2	Cash,	For the following sold at Market: From <i>Produce Acct.</i> , No. 1, 30 bush. Corn, a70	21 00	
10		From <i>Dairy Acct.</i> , sold to J. Barns. 60 lbs. Butter, a18	10 80	
10		From <i>Poultry Acct.</i> , 30 doz. Eggs, a14	4 20	36 00
$\frac{3}{2}$	Family Account,	Paid <i>Cash</i> for the following: Groceries bought of G. Green, Clothing bought of J. Bird,	3 80 2 30	6 10
$\frac{9}{2}$	Horse Team Acc	Paid <i>Cash</i> for Shoeing Horses,		1 25

MAY 10TH, 1857.

$\frac{13}{4}$	Field D., No. 2,	From <i>Manure Acct.</i> , 100 Loads, a15			15 00
		—12—			
$\frac{13}{5}$	Field D., No. 2,	Seed from <i>Produce Acct.</i> , No. 1, 1 $\frac{1}{4}$ bush. Corn, a\$1			1 25
		—20—			
$\frac{12}{4}$	Field D., No. 1,	From <i>Manure Acct.</i> , 45 Loads, a15	6 75		
		From <i>Produce Acct.</i> No. 2, 20 bush. Potatoes, a75	15 00		21 75
		—27—			
2	Cash, . . .	For the following sold at Market :			
10		From <i>Dairy Acct.</i> , to J. Adams, 9 lbs. Butter, a16	1 44		
10		From <i>Poultry Acct.</i> , 40 doz. Eggs, a11	4 40		5 84
		..			
4	Thos. Jones, .	Exchanged for a pair of Boots for him,			
10		From <i>Dairy Acct.</i> , 20 lbs. Butter, a18	3 60		
2		Cash paid him on Account,	12 00		15 60
		..			
$\frac{1}{2}$	Implement Acc't	Paid Cash, Repairing Drag and Plough,			2 85
		..			
$\frac{3}{2}$	Family Account,	Paid <i>Cash</i> for School Books, For paper, ink & postage stamps, Candy for Children,	2 75 1 05 18		3 98
		—31—			
3	Family Account,	Used for family as per Mary Earl's Account of the Month,			
10		From <i>Dairy Acct.</i> , Milk,			
		26 lbs. Butter, a15	1 00 3 90		4 90
10		From <i>Poultry Acct.</i> , 20 doz. Eggs, a13			2 60
2		From <i>Cash</i> for Jane Holden's wages for the Month,			4 00

MAY 31st, 1857.

		Estimate of Feed of Stock for the			
		Month,			
$\frac{9}{5}$	Horse Team, .	From <i>Produce Acct.</i> , No. 1,			
		1500 lbs. Hay, a\$9	6 75		
		20 bu. Oats, a40	8 00	14 75	
13		From <i>Field E.</i>			
		Pasture,		1 75	
		..			
$\frac{9}{5}$	Ox Team, . .	From <i>Produce Acct.</i> , No. 1,			
		1200 lbs. Hay, a\$9	5 40		
		10 bush. Corn, a60	6 00	11 40	
		..			
$\frac{10}{7}$	Dairy, . . .	From <i>Feed Acct.</i> ,			
		500 lbs. Shorts, \$15	3 75		
13		From <i>Field E.</i>			
		Pasture of 9 Cows, a\$1 25	11 25	15 00	
		..			
$\frac{11}{7}$	Sheep, . . .	From <i>Feed Acct.</i> ,			
		150 lbs. Shorts, a\$15		1 13	
		..			
$\frac{11}{5}$	*Hogs, . . .	From <i>Produce Acct.</i> , No. 1,			
		16 bush. Corn and Meal, a60		9 60	
		..			
$\frac{10}{5}$	Poultry, . .	From <i>Produce Acct.</i> , No. 1,			
		9 bush. Corn and Meal, a60		5 40	

*Hogs and Poultry have been fed from Grain for April and May, and are charged respectively at the end of May for both months.

APRIL, 1857.

Date.	A		B		D 1		P 2		D 3		F		G		H		J		K		Produce No. 1.	Produce No. 2.	Real Estate.	Gen'l Exps.	Total	Total	Total	Temperature—Degs.	Rain—Inches.	REMARKS.		
	Labor.	H. Team.	Labor.	H. Team.	Labor.	H. Team.	Labor.	H. Team.	Labor.	H. Team.	Labor.	H. Team.	Labor.	H. Team.	Labor.	H. Team.	Labor.	H. Team.	Labor.	H. Team.	Labor.	H. Team.	Labor.	H. Team.	Labor.	H. Team.	Ox Team.	Ox Team.	Ox Team.			
1																																Chopping and Loading in Field G.
2																																do
3																																do
4																																do
5																																do
6																																do
7																																do
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Sum.....	2 1/2	1/2	1 1/2	1/2	3 1/2	1 1/2	10 1/2	5 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	2 1/2	1 1/2	2 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2			
Value.....	\$3 00		\$1 50				\$25 13				\$3 60				\$2 1/2		\$20 13 1/2		\$2 1/2		\$1 50											
Feeder Price.	12		12		12		13		13		14		14		14		14		15		5		7		1		3		9			

On the margin of this Table is the date, opposite to which, is kept an account with the Fields for Labor and Team Work. The fields placed over the divisions correspond to the Fields as laid down in the plan. Divisions are also appropriated to Produce Accounts Nos. 1 & 2—to Real Estate, (for permanent improvements, as building, fencing and ditching) and to General Expense, (for such work account.) The columns headed *Total of Labor*, of *Horse Team* and of *Ox Team*, present the sum of Labor and Team Work for the day. The first two columns are used for noting the Temperature and the fall of rain. A space follows for remarks in regard to the kind of labor and state of the weather.

The columns for Fields, Produce Accounts and General Expense, are added up at the close of the month, and the value of labor and team work computed at such rate as the farmer may determine, and these amounts placed in the line below the sum of days. In the example given, the labor and horse team are rated at one dollar each, and the ox team at seventy-five cents. The rates may be varied from month to month at pleasure. These accounts, viz: Fields, Produce Accounts, and General Expense, cost, and must therefore be posted to the Ledger as *debtors*. The columns for Labor and Team Work must also be added up and computed, and as these have *produced*, must be posted to the Ledger as *creditors*. (See p. 22)

MAY, 1857.

Date.	A		B		D 1		D 2		D 3		E		H		J		K		Produce No. 1.		Produce No. 2.		Real Estate.		General Exp. se		Total		Temp. three-Feet.		REMARKS.
	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	Labor.	Ox Team.	
1																															Sowing Plaster.
2																															do
3																															At Mill and at Market with Corn.
4																															At work in Fallow.
5																															Plowing out Ditches.
6																															Plowing for Corn and Gardening.
7																															do
8																															Draining for Corn and Gardening.
9																															Marking Corn Ground & preparing Seed
10																															Planting Corn.
11																															Planting Potatoes and Gardening.
12																															Cutting Potatoes for Seed.
13																															Chopping and Logging in Fallow.
14																															do
15																															Preparing and Manuring Potatoe Gr'nd
16																															Manuring Potatoe Field.
17																															do
18																															Planting Potatoes.
19																															Logging and Burning Fallow.
20																															do
21																															Logging, Burning and Gardening.
22																															Washing Sheep.
23																															At Agricultural Society and Market.
24																															Repairing Barn and Yard.
25																															Breaking Fallow and Gardening.
26																															do
27																															do
28																															do
29																															do
30																															do
31																															do
Sum....	3					16 4	3	15 5	3				4	2	2					1	1			14 5	5	6 5	1	1	1	14	
Value.	\$3 06				\$22 25	\$22 25		\$22 75					\$7 50	\$2 50			\$1 00			\$2 00				\$18 25	\$8 25	\$3 00	\$13 00	\$10 50			
Ledger																															
Page.																															

To know if the calculation of days be correct, compare the sum of labor as entered in the accounts debited, and see if it correspond with the *Total of Days*, which, in the Table for April, of this example, is 51;—the same method should be pursued with Horse Team and Ox Team. The correctness of the calculations should also be tested, by comparing the sum of credits with the sum of debits. These Tables, it will be perceived, answer the purpose of Journal and Day Book. They are here accommodated to the size of the page, and are necessarily confined to a small compass. In the Blank Books for the use of the farmer, ample space is given, so that the entries may be freely made. The totals of Labor, Horse Team

and Ox Team, which are *creditors*, are distinguished from the debtor accounts by the color of the rulings. A column in the largest sized blanks is introduced to note the direction of the wind. When the temperature is noted morning and noon, it may be placed in fractional form—the one above, the other below.

Only the names of such fields as are having labor performed in them, need be entered in the Time Table of any month—thus the divisions in the Blank Books will accommodate twice the number of fields. A boy's labor should be entered according to its proportionate value, as $\frac{1}{4}$, $\frac{1}{2}$, or $\frac{3}{4}$ of a day; a man's labor being the standard—so also of a one horse team.

CONTINUATION
OF THE
FARM ACCOUNTS FOR THE YEAR.

The examples which have been given of the months of April and May, serve as a general guide to the farmer in taking the blank books and making the entries appropriate to his own farm ; but in order to exhibit the adaptation of the system to the different kinds of business occurring in the various seasons of the year ; and also, to show the closing up of the accounts and the results of the whole ; the transactions, in continuing the business of Maple Grove Farm for the remaining ten months, are here given in *narrative* form, and posted in *monthly amounts* to the Ledger.

To those who have now acquired a knowledge of the manner of making the Day-Book entries, as here exhibited, and of posting the same to the Ledger, this is all-sufficient ; but the student, who requires to study the system in all its details, will be greatly benefitted by taking these narratives and exercising his skill in making the proper Day-Book entries in debit and credit form, as shown in the examples ; testing the correctness of his work, by comparing it with the monthly amounts as here posted, observing always that these amounts include also the labor and team work as presented in the materials given for the Time-Tables.

These narratives are accompanied by explanatory notes, which will enable the farmer to solve any difficulty which may occur, and will greatly facilitate the progress of the student, where this work is used as a school book.

In these transactions, a dash is placed between the items which are debited or credited to different accounts, thus, milk and butter have only a comma between them, because both are from Dairy, while butter and eggs are divided by a dash, thus, 5 lbs. of butter—10 doz. eggs.

Apples come from the orchard, all the other fruits named are from the garden.

All dried fruits, stocking yarn, etc., are prepared by, and credited to the family.

TIME-TABLE.

The work for the Time-Table follows that of the Day-Book, and is presented in concise tables, arranged in the following order:—Date, Labor,

Horse Team, Ox Team, Explanations; and should be written out on the blanks in the same manner as that of April and May. The temperature and fall of rain are omitted as not essential.

DAY-BOOK TRANSACTIONS

To be entered in the Blanks ruled for the Day-Book in the order particularly explained, and according to the examples given in the months of April and May.

JUNE 8TH.

Bought Furniture consisting of Pans and Strainer, amounting to \$3.50, and paid for the same, 20 doz. Eggs, a10c.—Cash, \$1.50. (Furniture Account Dr.)

12TH.

Bought Calico for family use, \$2 70, and paid for the same, 10 lbs. Butter a16c.—10 doz. Eggs, a11c. Received cash for 2 Pigs, a\$1.75 ea.—110 lbs. Butter, a18c.—10 doz. Eggs, a13c.

Bought for family use and paid cash—Groceries, \$2 75 ; Summer Pants and Coat for Charles, \$7.25.

17TH.

Bought 1500 lbs. Feed for cash, a\$18 per ton.

24TH.

Bought for Thomas Jones, suit Summer Clothes, and paid for the same 50 lbs. Butter, a18c. Received cash for 12 doz. Eggs, a12c.—50 lbs. Wool, a40c.

27TH.

Paid for repairing breaking Plow and Chains, cash, \$1 00.
(Implement Account Dr.)

Appropriated for family use, 20 lbs. Wool, a40c.

30TH.

Estimate for the Month :

Family Account—Milk, \$1.00 ; 30 lbs. Butter, a16c.—20 doz. Eggs, a10c.

*Vegetables from Garden, \$2.15. Cash for Jane Holden's wages, \$4.

Horse Team Account—†1000 lbs. Hay, a\$9 00, 20 bush. Oats, a50c.—Field E pasture, \$1 75.

Ox Team Account—5 bush. Corn, a65c.—‡250 lbs. Feed, a\$15—Field E pasture, \$2 50.

Dairy Account—Field E pasture, \$9.00.

Hog Account—4 bush. Corn, a65c.—300 lbs. Feed, a\$15.

Poultry Account—1 bush. Corn, a65c., 2 bush. Oats, a50c.

*Family Account is here debited, and Produce Account No. 2 credited. Another entry will be made and Produce Account No. 2 debited, and Garden A credited. The debits and credits for garden stuffs in Produce Account No. 2, are made in the cash value, as the variety of products could not otherwise be represented. In a note for the month of July, Produce Account is further explained.

†The entry in Produce Account No. 1, will be made in lbs., for convenience of adding the columns.

‡When there is half a cent in calculations, it is customary to call it one cent in the amount: thus, 87½—88, &c.

JULY 1ST.

Used for Field D, No. 3, 16 loads Manure, a15c.

Bought for family—Bonnet for Ann, \$2.30, Hat and Coat for Edward, \$3 75, Hat and Shoes for Charles, \$4 75, Groceries, \$3 30, Fire Crackers and Pin Wheels for the children to be patriotic with on the 4th, \$1 00. Paid for the above, cash \$11 10, and 1 bush. *Cherries a\$4 00.

4TH.

Paid cash for family entertainment, \$3.50.

10TH.

Harvested from Field K, 30 loads Hay, estimated at 26 tons, (52,000 lbs.) a\$6.

Paid to Thomas Jones cash on account, \$12 50.

16TH.

Sold for cash, 4 Lambs, a\$2--40 lbs. Butter, a16c.—1½ bush. Currants, \$1.50.

Paid cash for the following, for the family—Carding 20 lbs. Wool, a\$6c., Groceries, \$2.00, Clothing \$3 60—for Field D, No. 3, Turnip Seed, 25c.—for a Cradle rigged, \$3 50, 2 Rakes a25c., 1 Pitch Fork, a75c.

†Paid for my note given to J. Andrews, due 18th September, which I now take up—cash, \$29—two yearling Steers, \$31.

31ST.

Paid Thomas Jones cash on account, \$3 00.

Estimate for the Month :

Family Account—Milk, \$1; 30 lbs. Butter, a15c.—25 doz. Eggs, a10c.—Vegetables, \$2 40, 2 bush. Currants a\$1, 1½ bush. Cherries, a\$1 50—2 bush. Apples, a62½c.—Killed a Weather for family use, 60 lbs., a6c.—Cash for Jane Holden's wages for the month, \$4.

Horse Team Account—500 lbs. Hay, a\$10—600 lbs. Feed, a\$20—Field E pasture, \$3.

Ox Team Account—200 lbs. Feed, a\$15—Field E pasture. \$2 50.

Dairy Account—Field E pasture \$4 50—Field K, \$4 50.

Sheep Account—Field E pasture, \$2 50.

Hog Account—1000 lbs. Feed, a\$15.

Poultry Account—1 bush Corn, 65c.; 2 bush. Oats, a50c.

Labor Account—Paid cash for hired hands, this month, \$3 75.

*It has formerly been remarked that the two Produce Accounts present the entire products of the farm, so that waste and shrinkage may be accurately known, and also the profit or the loss resulting from holding over. When grains or hay are harvested, they are entered to the debit of Produce Account No. 1, and to the credit of the field where they were grown. When roots or fruits are gathered, they are entered to the debit of Produce Account No. 2, and to the credit of the field, garden or orchard where grown. In the present case the Family Account is debtor for the Cherries, and Produce Account No. 2 is creditor. The debit entry to Produce No. 2 is given at the close of the month, and explained in a note.

†It will be seen that this note is not due, but as James Earl can spare the money, and wishes to sell the steers, he prefers to take it up now, and no account is made of interest.

*On examining the transactions of the month, I find the following has been sold and used in the family, as gathered : Produce Account No. 2—from Garden A, Vegetables, \$2 40; Cherries, \$6 25; Currants, \$4.25—from Orchard B, 2 bush. Apples, a62½c.

AUGUST 1st, 1857.

Received cash for Bills Receivable, (J. Gould's note due this day,) \$60.

10TH.

Sold for cash, 6 pairs Chickens, a44c., 15 doz. Eggs, a15c.—10 bush. Apples a\$1; ½ bush Plums, a\$4.

Used for family, 4 bush. Wheat, ground at mill, a\$1 15, 6 bush. Corn, a70c.

Bought for cash, 3,500 lbs. Feed—\$27 for the lot.

Paid to Thomas Jones, cash on account, \$14.

17TH.

Produce harvested from Field F, 32 loads Hay, estimated at 25 tons, (50,000 lbs.,) a\$7.

20TH.

Received of J. Stevens his note payable in 30 days, for a cow, \$23.

28TH.

Sold for cash, 12 bush. Apples, a87½c.—12 pairs Chickens, a37½c., 20 doz. Eggs, a12c.

Bought for family use, and paid cash, 12 yds. Lawn for Mary Earl, a30c., 12 yds. Calico, a12c., Silk Apron \$1 50, 3 yds. Ribbon, a30c., Coat and Pants for self, \$6.30, Hotel bill and Oranges for children, \$1 50.

Labor Account—Paid cash for hired hands in harvest field, \$5.

Paid for setting shoes on horses, cash, \$1 75.

Repairing Horse Rake, \$1 50. (Implement Account.)

Estimate for the Month :

Family Account—Milk, \$1, 34 lbs. Butter, a15c.—10 doz. Eggs, a10c., 4 pairs Chickens, a37½c.—Vegetables from Garden, \$4—4 bush. Apples, a56c.; 1 bush. Plums, a\$2—Cash for Jane Holden's wages \$4.

Horse Team Account—600 lbs. Feed, a\$20—Field K pasture, \$3 75.

Ox Team Account—600 lbs. Feed, a\$15—Field E pasture, \$1 25—Field C pasture, 1 25.

Dairy Account—Field K pasture, \$6 37—Field E pasture \$2 63.

Hog Account—600 lbs. Feed, a\$15—They have had the run of stubble this month.

Poultry Account—Run of stubble—no charge.

*When these items are taken directly from the field or garden to be sold or used, Produce Account is to be credited for them, and no entry made for the field whence gathered; now, however, at the close of the month, we go back and collect these items from the record, and debit Produce Account, and credit the fields which produced them. This is done to avoid the inconvenience of numerous little entries. But when these productions are stored, instead of sold or used directly, Produce Account is at once debited and the fields credited.

Sold and used as gathered, Produce Account No. 2—from Orchard B, 10 bush. Apples, a\$1, 12 bush. a87½c., 4 bush. a56c.—from Garden A, ½ bush. Plums, a\$4, 1 bush. \$2, Vegetables, \$4.

SEPTEMBER 2ND, 1857.

*Threshed the following and paid for the same in cash—Field H, 400 bush. Wheat, a\$4 per 100—Field C, 260 bush. Barley, a\$2 per 100.—Field J, 480 bush. Oats, a\$2.50 per 100.

Produce harvested from Field H—400 bush. Wheat, \$1.15; Straw, \$30—Field C, 260 bush. Barley, a60c.; Straw, \$15—Field J, 480 bush. Oats, a30c.; Straw, \$27.50.

4TH.

†Contracted with J. Mead & Co., to deliver 200 bush. Wheat in the course of the month, a\$1 25.

Delivered on the above contract, 40 bush. Wheat, a\$1 25.

Bought Feed for cash, 1 ton, (2000 lbs.,) a\$17.

Received cash for 1 ton Hay, (2000 lbs.,) a\$10.

8TH.

Sold for cash, 50 bush. Potatoes, a50c., 27½ bush. Apples, a62½c.

9TH.

Delivered to J. Mead & Co., on contract, 80 bush. Wheat, \$1 25.

Received of J. Mead & Co., on Wheat contract, \$50.

14TH.

Seed for Field G, 24 bush. Wheat, a\$1 20.

16TH.

Received cash for 25 bush. Apples, a\$62½c.

21ST.

Received cash for 80 bush. Barley, a62½c.

25TH.

Delivered to J. Mead & Co., on contract, 80 bush. Wheat, a\$1 25.

Received cash from J. Mead & Co., for bal. due on Wheat contract, \$200.

Received cash for Bills Receivable, (J. Stevens' note,) \$28.

†The Fields H, C, and J, are each charged with the cost of threshing. In this entry Produce Account is debited for Wheat and Straw, and Field H credited; and so with the other Fields. This may be made in three entries, one for each Field, or in one entry, thus:

Produce Account No. 1—From <i>Field H</i> ,			
400 bush. Wheat	a\$1.15	460	
Straw,		30—	490
From <i>Field C</i> ,			
260 bus. Barley,	a60c.	156	00
Straw,		15	00—171
From <i>Field D</i> ,			
480 bush. Oats,	a30c.	144	00
Straw,		27	50—171 50
			<hr/> 882,50

†This entry is frequent with some farmers who contract to furnish Butter for the season. The contract is inserted in the book as in this case, and the person debited when delivery is made, and credited as payment is received.

26TH.

Received cash for 50 bush. Oats, a36c., 2400 lbs. Hay, a\$10—For young Stock, 310 lbs. Beef, a6c., Hide, 60 lbs., a4c.—500 lbs. Cheese, a9c., 200 lbs. Butter, a18c.—30 doz. Eggs, a10c., 12 pair Chickens, a37½c.

Received cash for the following prepared by the family—2 bush. Dried Apples, a\$1.25, 3 lbs. Stocking Yarn, a\$1. The children have sold Berries and received through the season \$10, which they wish used for winter Clothing. (Family Account Cr. for the whole.)

Bought for family Winter Clothing, Boots and Shoes, \$16, Shawl, Dress and Ribbon for Mary Earl, \$19.60, Dresses, Cloaks and Bonnet Trimmings for Jane, Ann, and Edward, \$19.40, suit for self, \$26, for Charles, \$21 30, 1 piece Shirting, \$3.10, Fish, Salt and Groceries, \$13.88.

Entertainment at Hotel, \$1 75.

29TH.

Received cash for 40 bush. Apples, a50c., 50 bush. Potatoes, a40c.

30TH.

Labor Account—paid for hired help in cash, \$3.25.

Labor of Thomas Jones for 6 months, a\$14. (Credit Jones and debit Labor.)

Paid Thomas Jones on settlement of his account for 6 months, \$79 90.

Paid for ½ year's interest on \$50, to T. Jones, \$1.75. (Dr. Interest Acct.)

Purchase of Implements and repairs for cash, 2 Hoes, 50c. each, 2 Corn Cutters, 37½c. each, repairing market wagon, \$2 50.

Estimate for the Month :

Used and reserved for family—Milk, \$1, 25 lbs. Butter, a16c., 125 lbs. Cheese, a7c.—15 bush. Apples, a33½c., 5 bush. Potatoes, a30c.—15 doz. Eggs, a10c., 10 pair Chickens, a30c. Paid cash for Jane Holden's wages, \$4.

Horse Team Account—22 bush. Oats, a30c., 1200 lbs. Hay, a\$8—From Field E pasture, \$2.50.

Ox Team Account—500 lbs. Hay, a\$8—600 lbs. Feed a\$15—From Field E pasture, \$1 75.

Dairy Account—From Field K pasture, \$4—Field E pasture, \$4.

Hog Account—800 lbs. Feed, a\$15.

Poultry Account—Screenings from grain, \$2.

Sold and used as gathered, Produce Account No. 2—From Field D No. 1, 105 bush. Potatoes, a42c.—From Orchard B, 105 bush. Apples, a53c.

OCTOBER 1ST, 1857.

*Paid cash for entry and Feed of Stock at Fair, and driving, \$2 75.—(General Expense.)

*The language used in recording the transactions from this time is varied, so as to ensure a greater degree of skill on the part of the student, and to enable him to make entries under any circumstances.

Paid cash for entertainment of self and family at Fair, \$3 75. (Fam. Acct.)

Paid cash for 1 Mirror, \$10, Table, \$8.50, 2 Ottomans, a\$6.50, Kitchen Furniture, \$3.80—Books and Stationery for winter school, \$5.50.

Received cash for interest on Mortgage on S. Barns' Clothing Works, \$300, a7 per cent. and instalment on Mortgage, \$75. (Int. Account credited, and Bills Receivable for instalment.)

Bought for cash, 40 acres adjoining me, for a Wood Lot, a\$10 per acre. This lot designate N. (Debit Real Estate.)

Gathered from Field D No. 1, 456 bush. Potatoes into barn, pit and cellar, estimated a30c.

5TH.

Attended School Meeting.

9TH.

Gathered from Field D No. 2, 24 loads Pumpkins, a\$1.

Used for family, 64 lbs. Mutton, a4c.

10TH.

Gathered from Garden 5 bush. Onions, a60c.; 4 bush. Beans a\$1; 200 Heads Cabbage, a1½c.; Beets, \$2; Carrots, \$1; 12 Winter Squashes, a6¼c.

13TH.

Gathered from Orchard—420 bush. Apples, a40c.

22ND.

Gathered from Field D No 2—1246 bush. Corn in the ear, a20c.; Corn Fodder, \$20.

25TH.

Paid cash for hired hands, 26 days, \$26. (Debit labor and credit cash.)

28TH.

Gathered from Field D No. 3—638 bush. Ruta Bagas, a12c.

29TH.

Sold for cash—50 bush. Apples, a50c.

30TH.

Paid cash for shoeing Horses, \$1.75.

Gathered from Orchard 100 bush. Apples a30c., of which I made 10 bbls. Cider. (Treat one bbl. cider, as 10 bush. apples.)

Estimate for the Month :

Used and reserved for family—Milk, \$1; 35 lbs. Butter, a18c.—10 doz. Eggs, a16c.; 6 pairs Chickens, a30c.—25 bush. Potatoes, a30c.; 5 bush. Turnips, a12c.—30 bush. Apples, a40c.; 4 bbls. Cider, a\$3; Garden stuffs, \$13.73. Paid Jane Holden's wages, \$4. Jane wishes to work for her board this winter and go to school.

Horse Team Account—½ ton (1000 lbs.) Hay, a\$8; 15 bush. Oats, a30c.—pasture in Field K, \$2.50.

Ox Team Account—4 loads Pumpkins, a\$1—400 lbs. Feed, a\$15 per ton—pasture in Field E, \$2.

Dairy Account—4 loads Pumpkins, a\$1—Field K pasture, \$5.

Hog Account—6 loads Pumpkins, a\$1—20 bush. Meal, a50c.

NOVEMBER 3RD, 1857.

Sold for cash—50 bush. Apples, a50c.

4TH.

Sold for cash—6 bbls. Cider, a\$3.25; 20 bush. Apples, a50c.

6TH.

Sold for cash—50 bush. Potatoes, a40c.

9TH.

Sold for cash—50 bush. Potatoes, a36c.

14TH.

Sold for cash—60 bush. Apples, a50c.

17TH.

Sold for cash—50 bush. Potatoes, a36c.

19TH.

Sold for cash—50 bush. Apples, a50c.

28th.

Sold for cash—50 bush. Apples a45c.—6 Turkeys, a\$1; 10 doz. Eggs, a20c.

31st.

Deposited in J. McNair & Co.'s Bank, \$200.

Estimate for the Month:

Family Account—4 bush. Wheat, a90c.; 2 bush. Meal, a50c. Exchanged 1½ bush. Wheat, a90c for 100 lbs. Buckwheat—Milk, \$1; 20 lbs. Butter, a16c.—8 doz. Eggs, a16c., Turkeys and Chickens, \$2.00—8 cords fire Wood delivered from Wood Lot, a\$1.25.

Paid cash on account, to Thomas Jones, \$26.

Horse Team Account—¾ ton (1500 lbs.) Hay, a\$7; 20 bush. Oats, a30c—300 lbs. Shorts, a\$15—pasturing in Field F, \$2.

Ox Team Account—2 loads Pumpkins, a\$1; 5 bush. Turnips, a12c—8 bush. Meal, a50c.—pasturing in field E, \$2.

Dairy Account—30 bush. Turnips, a12½c.; 2 loads pumpkins, a\$1—pasturing in Field K, \$4.

Hog Account—6 loads Pumpkins, \$6—30 bush Meal, a50c.

DECEMBER 2ND, 1857.

Sold for Cash—2550 lbs. Hay, a\$10 per ton.

4TH.

Sold for cash—2464 lbs. Hay, a\$10.

8TH.

Scattered over Orchard—40 loads manure, a12c.

9TH.

Sold for cash—2482 lbs. Hay, a\$10. Sold for cash—2364 lbs. Hay, a\$10.

18TH.

Sold for cash—60 bush. Corn, a25c.—20 doz. Eggs, a20c.; 4 Turkeys, a\$1;
6 pairs Chickens, a45c.—3 lbs. Stocking Yarn, \$1; 6 pairs socks, a50c.;
8 gallons Apple Butter, a62½c.

Sold for cash—60 bush. Corn, a22c.

22ND.

*Killing and marketing Hogs—Labor 5 days, a\$1; Team 1 day, \$1.

Sold for cash—6 Pigs, 850 lbs., a\$6; 4 Hogs, 1340 lbs., a\$6.50.

Reserved for family—2 Pigs, 260 lbs., a\$5; 4 Hogs, 1250 lbs., a\$6—cash
for Christmas Presents, \$6.50.

29TH.

For family—12 bush. Wheat a90c.; 4 bush. Corn, a50c. Paid cash for
200 lbs. Buckwheat, \$1.25 per 100 lbs.

31ST.

Estimate for the Month:

Family Account—Milk, \$1; 14 lbs. Butter, a15c.—6 doz. Eggs, a8c.; Tur-
kies and Chickens, \$3.25.—5 cords Wood from Lot M, a\$1.25.

Sheep Account—Pasturing 3 months from Field J, \$12.50.

Young Stock Account—Pasturing from Wood Lot M for the season, \$40;

Hog Account—32 bush. Corn, a40c.—6 bush. small Potatoes, a25c.

Dairy Account—1500 lbs. Hay a\$7.50—40 bush. Turnips, a12c.—Pasturing
from Field E, \$3.

JANUARY 1, 1858.

Received of Thos. Arnold, 8 Horses to board for the winter, a75c. per week.

Received of him a note for account of \$50—cash for interest, \$2.63.

Received of Robert Woodgrove, 4 Oxen to board for the winter, a62½c. per
week each.

Deposited with J. McNair & Co., cash, \$200.

We have taken a pair of Steers from Young Stock for a working team,
\$60.—(Ox Team No. 2, debtor; Young Stock, creditor.)

9TH.

Sold for cash—3 Turkeys, a\$1.50; 5 doz. Eggs, a20c.—140 lbs. Butter, a20c.—
Dried Fruit, \$4.

Bought for cash—Pants for self, \$4; Vest, \$2; Pants for Charles, \$3.50;
Cloth for family, \$7.75; Groceries, \$3.40.

21ST.

Used for family, 62 lbs. Mutton, a4c.

*The debit to Hog Account for labor, presents an example in which labor is entered in the Day Book; hitherto all such entries have been made to General Expense in the Time Table, but when the amount is considerable, one such as this is preferable.

Paid cash for repairing sleigh and harness, and painting cutter, \$7.25.
Deposited with J. McNair & Co., \$100.

24TH.

*Paid cash—my subscription towards enlarging and repairing School House, so that the children may enjoy the advantage of an Academy in our own district, instead of sending them abroad, deprived of family influences, and at a much greater cost than would be necessary to secure equal advantages at home, and render our own school adequate to the wants of the neighborhood, \$16. (Real Estate Dr.)

26TH.

Received cash for interest on Bills Receivable, (mortgage by S. Baker, blacksmith,) \$500, a7 per cent., and instalment due on the same, \$100.

31ST.

Used for family—Milk, \$1; 16 lbs. Butter, a15c.—6 doz. Eggs, a15c., and Fowls, \$2—34 cords Wood, a\$1.25.

Feed of stock for the winter will be recorded at the close of the month of March.

FEBRUARY 2ND, 1858.

Sold for cash—25 bush. Corn, a50c.—60 lbs. Butter, a16c.—8 doz. Eggs, a15c.

Drawn on Field H—100 loads Manure, obtained by exchange of Straw, \$15. (Produce Account No. 1, has produced, and Field H costs.)

20TH.

Logs from Wood Lot M, have produced 5,000 ft. of fencing stuff and barn boards, which I have brought home to be used on the premises. Value of logs, \$25; paid for sawing the same, \$2.50 per 1000 ft. (Real Estate is debtor to Wood Lot for the lumber, and to cash for sawing.)

23D.

Received premiums awarded at the State Fair on Mare and Colt, \$10; and on Cow and Calf, \$7.50. (Horse Account and Dairy are creditors.)

†Contracted with J. Tibbits for 5 tons Hay, to be delivered as soon as the weather will permit, and at the same time delivered one load, 2630 lbs.

24TH.

Delivered to J. Tibbits on contract, one load Hay, 2540 lbs.

28TH.

Delivered to J. Tibbits on contract, one load Hay, 2365 lbs.

Used for family—Milk, \$1; 16 lbs. butter, a14c.—8 doz. Eggs, a14c.; fowls, \$2—11 cords Wood, a\$1.25.

*We debit Real Estate with this subscription, because Real Estate is enhanced in value by all such improvements.

†This contract is kept in the form of a memorandum—no entry for value being carried out till the contract is completed. See entry of the 7th March. Each load is minuted, as delivered, in the Day-Book, and weigh scale tickets kept for reference.

MARCH 5TH, 1858.

Received cash from J. Tibbits for four loads of Hay, delivered according to contract. Weight as per tickets, as follows: Feb. 23d, 2630 lbs.; Feb. 24th, 2540 lbs.; Feb. 28th, 2365 lbs.; this day, 2450 lbs., a\$10 per ton.

7TH.

Loaned on Mortgage, to Joseph Morris, \$600, for which I have given him my check on J. McNair & Co., for \$500, and cash \$100. This mortgage covers neighbor Morris' farm and saw mill, for the improvement of which he has taken this loan. Interest, a7 per cent. Principal to be paid in four equal annual instalments, commencing March 7, 1860.

15TH.

Paid interest on Widow Marsh's note, \$235, a7 per cent., \$16.45 (Interest costs cash.)

16TH.

Sold for cash, 200 lbs. grained Maple Sugar, a13c. (Wood Lot M produces.)—126 lbs. butter, a20c.—20 doz. Eggs, a20c.

Reserved for family use, 236 lbs. Sugar, a10c.; 15 gals. Molasses, a60c.; 1 bbl. Vinegar, 35 gals., a10c.

Paid cash for Clothing, \$38.75; Groceries, \$3.60—a piece of Sheetting, 40 yards, a10c.; 1 piece of Toweling, 20 yards, a14c. (Sheetting and Toweling are Furniture Account.)

28TH.

Sold for cash—30 bush. Apples, a50c.—380 lbs. Butter, a15c.

29TH.

Sold for cash—4 Hams, 62 lbs., a12½c.; 100 lbs. Lard, a12½c. (These were taken from *family* stores.)

31ST.

Used for family—Milk, \$1; 16 lbs. Butter, a20c.—15 doz. Eggs, a13c.; Fowls, \$2.50—6 cords Wood, a\$1.25.

Feed of Stock for the Season :

Horse Team Account.—3 Horses and Colt for 4 months, 5 tons Hay, (10,000 lbs.,) a\$7.50; 60 bush. Oats, a30c.; Fodder, \$5—10 bush. Potatoes, a30c.—¾ ton (1500 lbs.) Feed, a\$14.

Ox Team Account.—For 4 months, 4000 lbs. Hay, a\$7; 60 bush. Corn Meal, a45c.; Fodder, \$5—60 bush. Turnips, a12½c.

Dairy Account.—For 3 months, 8000 lbs. Hay, a\$7; Fodder, \$20—180 bu. Turnips, a12½c.—1500 lbs. Feed, a\$14—Pasturing 4 Calves in Field L, in summer, \$6—Labor and Care of Dairy, \$50.

Young Stock Account.—For 3 months, 4000 lbs. Hay, a\$6.50; Fodder, \$8—140 bush. Turnips, a12½c.

Sheep Account.—For 3 months, 3000 lbs. Hay, a\$6.50; Fodder, \$5—60 bu. Turnips, a12½c.

Ox Team Account, No 2—For 3 months, 2000 lbs. Hay, a\$7; Fodder, \$5—46 bush. Turnips, a12½c.

Hog Account—For 3 months, 30 bush. Corn, a40c.—Dairy, (milk and whey for the year,) \$10—Field L, pasture during the summer, \$16.

Robert Woodgrove owes for board of 4 Oxen for 3 months, a62½c. per week, \$32.14.

Thomas Arnold owes for board of 8 Horses for 3 months, at 75c. per week, \$77.14.

Boarding Stock Account—Estimate for 3 months—8 Horses, 14,000 lbs. Hay, a\$7; Fodder, \$14; 4 Oxen, 5000 lbs. Hay, a\$7; Fodder, \$7.50.

Poultry Accounts—Feed for 6 months, 36 bush. Corn, a40c.

We credit Thomas Jones with the amount of his half years' wages, \$84.

The family have performed labor and boarded the hands, and as they are charged with household expenses, they ought now to receive a credit.

Let then, the balance or difference between the debits and credits of labor be ascertained, and debit Labor Account, and credit Family Account with the same.*

Compute interest on all permanent and stock investments. The value of Fields, &c., will be ascertained from inventory of March, 1857. Debit the Family Account with the interest on house and lot and furniture; Implement Account with the interest on implements; the Field Acct. with the interest on their respective values, and Real Estate Account with interest on Lot N, \$14 being interest from date of purchase. Barn and Stables have no account opened, and as Manure is of nearly the same value, and is by many considered a fair equivalent for rent, let Manure Account be debited with the interest on the same. A number of entries will thus be avoided.

Interest on Stock is as follows, their value varying from the inventory in accordance with sale and purchase during the year: Horse Team, \$18.90; Ox Team, \$8.40; Dairy, \$22.05; Young Stock, \$9.52; Sheep, \$3.85; Hogs, \$5.32; Poultry, \$1.26.

* No account is kept with Thomas or Mary Earl or their children, as it was deemed alike contrary to wise policy and good morals, to distinguish between the interest of man and wife, and establish separate interests between the members of the family, all of whose relations should be regulated by the law of mutual dependence. Those who prefer another course, can open accounts and treat themselves as hired hands.

TIME - TABLES.

For an explanation of the tables, and the method of entering them, see explanations at the commencement of Day-Book transactions, page 23.

JUNE.

Date.	Field.	Labor.	H. Team.	Ox Team.	REMARKS.	Date.	Field.	Labor.	H. Team.	Ox Team.	REMARKS.
1	G	2 1/2	1	1	Breaking up and Burning.	16	G	2	1	1	Breaking up and Marketing.
2	..	2 1/2	1	1	do do	17	Gen. Ex	1	1 1/2	1	Grubbing.
3	D 2	2 1/2	1 1/2	1/2	Cultivating.	18	..	2	1	1	At Mill.
4	G	2	1	1	Breaking up.	19	Et'l Esta	2	1 1/2	1	Boarding up Shed.
5	D 2	1	1 1/2	1	Cultivating.	20	..	2 1/2	1	1	Laying Stable Floor.
6	G	2	1	1	Breaking up.	21	..	2 1/2	1	1	Repairing Bins and Mow.
7	..	3	1 1/2	1	Cultivating and Hoeing.	22	G	2 1/2	1	1	Breaking up and Grubbing.
8	Gen. Ex	1	1	1	Shearing Sheep,	23	..	2 1/2	1	1	do do
9	D 2	2	1	1	Hoeing Corn,	24	..	1 1/2	1 1/2	1/2	do do
10	D 2	2	1	1	do	25	Gen. Ex	1	1 1/2	1/2	do do
11	D 2	2	1	1	do	26	K	3	1	1	Mowing
12	G	2 1/2	1	1	Breaking up and Grubbing.	27	..	3	1	1	Mowing and Raking.
13	..	2 1/2	1 1/2	1/2	do	28	..	3	1	1	do do
14	A	1	1	1	Gardening and	29	D 1	3	1 1/2	1	Plowing and Hoeing Potatoes.
15	G	2	1	1	Breaking up.	30	..	2	1	1	do do
						31	K	2	1	1	And getting up Hay.

JULY.

1	D 3	3	1	1	Drawing Maure and Plowing	15	G	1	1	1	Dragging & Burning Stumps.
2	..	1	1 1/2	1/2	Sowing Turnips, and	16	C	2	1	1	Cradling Barley.
3	Gen. Ex	1 1/2	1 1/2	1/2	At Market.	17	Gen. Ex	1	1 1/2	1/2	At Market.
4	..	1	1 1/2	1/2	Chopping & repairing Impl's.	18	C	3	1	1	Cradling and Raking Barley.
5	..	1	1 1/2	1/2	All hands Celebrate.	19	..	2 1/2	1 1/2	1/2	do Finished.
6	K	3	1	1	Mowing	20	H	4	1	1	Harvesting Wheat.
7	D 2	1	1 1/2	1/2	Cultivating Corn.	21	..	1 1/2	1 1/2	1/2	do do
8	K	2	1	1	Mowing and Raking.	22	Gen. Ex	1 1/2	1 1/2	1/2	Choring.
9	D 2	3	1 1/2	1/2	Cultivating and Hoeing Corn.	23	H	3	1	1	Harvesting Wheat.
10	..	3	1 1/2	1/2	do do	24	..	3	1	1	do do
11	K	4	1	1	Getting up Hay.	25	C	3	1	1	Drawing Barley.
12	G	1	1	1	Dragging and	26	..	2	1	1	Hoeing Turnips.
13	K	2	1	1	Cultivating.	27	D 3	2	1	1	Cradling Oats.
14	A	1	1	1	Gardening and	28	J	2	1	1	Batchering Sheep.
15	G	2	1	1	Dragging & Burning Stumps.	29	Gen. Ex	3 1/2	1 1/2	1/2	Harvesting Oa's.
16	D 3	2	1	1	do do	30	H	2	1	1	Drawing in Wheat.
17	G	1	1	1	And Thinning Turnips.	31	J	1	1	1	Harvesting Oa's.
18	D 1	1 1/2	1 1/2	1/2	Hoeing Potatoes.		..	2	1	1	do do.

AUGUST.

1	H	2	1	1	Getting up Wheat.	19	G	2	1	1	Ploughing.
2	J	1	1	1	Cutting Oats.	20	Real Es.	1	1	1	Laying up Fence.
3	..	1	1	1	..	21	G	2	1	1	Ploughing.
4	H	4	1	1	Drawing in Wheat.	22	Real Es.	1	1	1	Ploughing.
5	F	1 1/2	1 1/2	1/2	Mowing.	23	G	1	1	1	Laying up Fence.
6	Gen. Ex	1	1 1/2	1/2	Getting up Wood.	24	..	2	1	1	Ploughing.
7	..	3	1 1/2	1/2	Mowing and Raking Hay.	25	Gen. Ex	2	1 1/2	1/2	At work on the Road.
8	F	3	1 1/2	1/2	do do	26	G	1	1 1/2	1/2	Ploughing.
9	J	4	1	1	Drawing in Oats.	27	Real Es.	1	1	1	Laying up Fence.
10	F	4	1	1	do Hay.	28	..	1	1	1	..
11	Gen. Ex	2	1 1/2	1/2	At Market and Mill.	29	G	2	1	1	Ploughing.
12	..	3	1	1	Haying.	30	..	2	1	1	Exchanged Threshing.
13	..	3	1	1	do	31	..	2	1	1	do do
14	..	3	1	1	do						
15	..	3	1	1	do						
16	Gen. Ex	3	1	1	Working on Road.						
17	F	4	1	1	Drawing in balance of Hay.						
18	G	2	1	1	Ploughing.						
19	Real Es.	1	1	1	Stumping in Follow.						

SEPTEMBER.

Date.	Field.	Labor.	H. Team.	Ox Team.	REMARKS.	Date.	Field.	Labor.	H. Team.	Ox Team.	REMARKS.
1	H	3	1		Threshing Wheat.	17	G	1	1		Dragging and
--	C	3	1		do Barley.	--	Gen. Ex	2		1	Getting up Wood.
2	J	6			do Oats.	18	G	1	½		Ploughing out water furrows,
3	H	3			Cleaning up Wheat.	--	Gen. Ex	2		1	And at work on road.
4	J	3			do Oats.	19	Prod. 1.	1	1		At Market with Wheat,
5	Prod. 1.	2	1	1	At Market with Wheat.	--	Gen. Ex	1	½		And at Mill.
--	Real Es.	1			Laying Fence.	20					
6						21	Gen. Ex	½			Butchering Steer,
7	B	½			Gathering Apples.	--	Real Es.	2			And Fencing Follow.
--	D 1.	2			Digging Potatoes.	22	Prod. 1.	1	1		At Market with Barley.
8	Prod. 2.	2	1½		At Mar. with Potatoes & Aples.	--	Gen. Ex	1	½		do do
9	Real Es.	3			Laying up Fence.	23	D 2.	2			Cutting Corn.
10	Prod. 1.	1	1	1	At Market with Hay.	--	Gen. Ex	1	½		Fencing Stacks.
--	Prod. 2.	1	1		do do Oats.	24	D 2.	3			Cutting Corn.
--	Real Es.	1			Laying Fence.	25	D 1.	1			Digging Potatoes.
11	B	¾			Gathering Apples, and	--	D 2.	1			Cutting Corn.
--	D 1.	2			Digging Potatoes.	26	B	2			Gathering Apples.
12	Prod. 1.	2	1	1	At Market with Potatoes and	--	Prod. 2.	1	1		Marketing.
--	Gen. Ex	1			Apples—Choring.	27					
13						28	Prod. 1.	2	1	1	Marketing.
14	G	3	1	1	Sowing Wheat and Dragging.	--	Gen. Ex	1			Measuring up Grain.
15	--	2	1	1	do do do	29	Prod. 1.	2	1	1	Marketing Wheat.
16	--	2	1	1	Dragging.	30	--	2	1	1	do do

OCTOBER.

1	D 1	1½			Digging Potatoes.	16	D 2	5	½		Husking Corn.
2	B	3	½		Gathering Apples.	17	--	5			do do
3	--	3	½		do	18					
4						19	D 2	5			do do
5	D 1	5			Digging Potatoes.	20	--	3	½		do do
6	--	5	½		do do	21	D 3	5	1		Gathering Turnips.
7	--	5	½		do do	22	D 2	5	½		Husking Corn.
8	--	5	½		do do	23	--	5	½		do do
9	--	5	½		do do	24	D 3	5	½		Gathering Turnips.
10	B	3	½		Gathering Apples.	25					
--	A	1½			do Garden Stuffs.	26	D 3	3	½		do do
11						27	--	3	½		do do
12	D 2	2			Husking Corn.	28	--	2	½		do do
--	Prod. 1.	1	1		At Mill with Corn.	29	Prod. 2	1	1		At Market with Apples.
13	B	5	1		Gath. Apples & at Cider Mill.	--	Prod. 1	2			Shelling Corn.
14	D 2	5			Husking Corn.	30	--	1	1		At Mill with Corn.
15	--	5			do do	31	B	1	½		Cider from Mill.

NOVEMBER.

1						16	E	1	1½		Breaking Up.
2	M	2	1		Getting up Wood.	--	Prod. 2	½		1	Preparing for Market.
3	Prod. 2	1	1		At Market with Apples.	17	--	1	1		Marketing Apples.
4	--	2	1½		Marketing Cider and Apples.	--	M	1			Chopping.
5	Gen. Ex	1			Choring.	18	--	1½	½		Getting up Wood & Chopping.
6	Prod. 2	1	1		Marketing Potatoes.	19	Prod. 2	1	1		Marketing Apples.
7	M	1	½		Getting up Wood.	--	M	1			Chopping.
8						20	E	1	1½	½	Breaking Up.
9	Prod. 2	1	1		Marketing Potatoes.	21	--	½	½		do do
10	--	E	1	1½	Breaking Up.	22					
--	M	1			Chopping Wood.	23	E	1	1½		Breaking Up.
11	E	1	1½		Breaking Up.	24	--	1	1½		do do
--	M	1			Chopping.	25	M	1½			Splitting Rails.
12	E	1	1½		Breaking Up.	26					Thanksgiving.
--	Gen. Ex	1	½		Choring.	27	Prod. 1	2			Shelling Corn.
13	E	1	1½		Breaking Up.	28	Prod. 2	1	1		Marketing Apples.
14	Prod. 2	2	1½		Marketing Apples.	29					
15						30	E	1	1½		Breaking Up.

In August, work was exchanged in threshing for neighbors, and no account charged, as the work was to be returned, and when so returned, was designed to be charged to the appropriate accounts. Thus, we find in September, the work is returned, and at that time is charged in threshing the grain.

In December 21st, work is done in killing and marketing hogs, which might have been charged to General Expense, but to show the method of making a Labor charge to an account not found in the Time-Table, it is made in the Day-Book, and thus the Hog account is debited, instead of General Expense.

D E C E M B E R .

Date.	Fields.	Labor.	H. Team.	Ox Team.	REMARKS.	Date.	Field.	Labor.	H. Team.	Ox Team.	REMARKS.
1	E	1	1½		Breaking.	18	Prod. 1.	1	1		Marketing Corn.
--	Gen. Ex	1½			Chopping.	19					
2	Prod. 1.	1	1		Marketing Hay.	20	Prod. 1.	1	1		Marketing Corn.
3	M	½			Chopping.	--	M	1			Splitting Rails.
4	Prod. 1.	1	1		Marketing Hay.	21					Day Book Entry.
5						22					do do
6	B	2	1		Manuring Orchard.	23	Real Es.	2			Fitting up Shed and Stables.
7	--	1	½		do do	24	--	2			do do
8	--	2	1		do do	25					Christmas.
9	Prod. 1.	1	1		Marketing Hay.	26	Prod. 1.	2	1		Marketing Straw.
10	--	1	1		do do	27					
11	M	2			Splitting Rails.	28	Gen. Ex	1	1		At Mill.
12						29	II	1	½		Drawing Manure.
13	E	1	1½		Breaking up.	30	--		½		do do
14	--	1	1½		do do	--	M	1	½		Getting up Wood.
15	--	1	½		do do	31	II	1	1		Drawing Manure.
16	--	1	1½		do do	--	Gen. Ex	1	½		Marketing Poultry.
17	--	1	1½		do do						

J A N U A R Y .

1					New Year's day.	17					
2	II	1	1		Drawing Manure.	18	II	1	1		Drawing Manure.
3						--	M	2½			Chopping.
4	M	2	1	½	Chopping & getting up Wood.	19	Prod. 1	2			Shelling Corn.
5	--	1			do do	20	M	2			Chopping.
6	--	1½	1		do do	21	Gen. Ex	1	½		Marketing.
7	--	2			Chopping.	--	M	1			Chopping.
8	--	1	1		Getting up Cord Wood.	22	M	1½		1	Getting up Cord Wood.
9	--	1	1		do do	23	II	1	1		Drawing Manure.
--	Gen. Ex	1	½		Marketing Butter, &c.	24					
10						25	M	½			Chopping.
11	II	1	1	½	Drawing Manure.	26	M	1½		1	do and drawing.
12	--	1			do do	27	II	1	1		Drawing Manure.
13	M	2			Chopping Cord Wood.	28	II	1	1		do do
14	--	2			do do	29	II	½	½		do do
15	--	1			do do	30	M	1½			Chopping.
16	II	1	1		Drawing Manure.	31					

F E B R U A R Y .

1	II	1	¾	¾	Drawing Manure.	14					
2	Prod. 1	1	1		Marketing Corn.	15					Storms, Jones Absent.
--	M	1			Chopping.	16	Prod. 1	1	1		Marketing Corn.
3	II	½	½		Drawing Manure.	17	M	1	1		Drawing Stuff from Mill.
--	M	1			Chopping.	18	--	1	1		do do
4	II	1	1		Drawing Manure.	19	--	½	½		do do
5	M	2			Chopping.	20	--	1			Chopping.
6	--	1½	1		do and Drawing	21					
7						22	M	1			Chopping.
8	M	1½	1	1	Drawing Logs to Mill.	23	Prod. 1	1	1		Marketing Hay.
9	--	½	1		do do	24	--	1	1		do do
10	--	1½	1	1	do do	25	M	1	½		Buckets & Kettles to S. Bush.
11	--	½	½		do do	26					Storms, Jones not at work.
12	Prod. 1	1			Shelling Corn.	27	M	1½			Fitting up in Sugar Bush.
13	-- 2	1½			Assorting Apples.	28					

M A R C H .

1	Prod. 1	1	1		Marketing Hay.	17	Gen. Ex	1	½		At Mkt. with Sugar & Butter
2	M	2			Tapping Trees, &c.	--	II	2	1	1	Drawing Manure.
3	--	2	½		do and tending Buckets	18	Prod. 2	1	1		Marketing Apples
4	--	2			Boiling and T. nding.	--	--	1			Attending to Hay and Grain.
5	Prod. 1	1	1		Marketing Hay.	19	II	1	½		Drawing & Spread'g Manure.
--	M	2	½		Boiling and Tending.	20	B	1½			Pruning Orchard.
6	--	2	½		do do	21					
7						22	II	2	1		Spreading Manure, and
8	M	2	½	1	Drawing Wood and	23	--	2	1		Plowing for Potatoes
9	--	2			Tending and Sugaring.	24	Prod. 2	2			Opening Pit & assor. Potatoes.
10	II	1	1		Drawing Manure.	25	H	2	1		Spread. M & plow. for Potatoes.
11	--	1	½	½	do do	26	Prod. 1	2			Shelling Corn.
12	M	1	½		Tending Sugar.	27	Real Es.	2			Fencing
13	II	1	½	½	do do	28					
14					Drawing Manure.	29	Prod. 2	1	1		Marketing Potatoes.
15	M	1½			Sugaring off.	30	--	1	1		do Apples.
16	--	2			Boiling for Molasses & Vinegar	31					Taking Stock and bal. Books.

THE STUDENTS' KEY TO TIME-TABLE.

In this is presented from Time-Table, work for each month from June to March—the amounts to the debits of the Fields, &c., and the credit of Labor and Team. The accounts are separated by a period, and Labor, Horse Team and Ox Team, follow in order, separated by a dash.

June 30.—A, 1. D No. 1, 5— $\frac{1}{2}$. D No. 2, 11 $\frac{1}{2}$ —1 $\frac{1}{2}$. G, 30—12 $\frac{1}{2}$ —12 $\frac{1}{2}$ K, 11—1. Gen. Ex, 4—1 $\frac{1}{2}$. Real Es., 6 $\frac{1}{2}$. *Credit*—Labor, 69; H. Team, 16 $\frac{3}{4}$; Ox Team, 12 $\frac{3}{4}$.

July 31.—A, 1. C, 10 $\frac{1}{2}$ —1. D No. 1, 1 $\frac{1}{2}$. D No. 2, 7—1 $\frac{1}{2}$. D No. 3, 8—1 $\frac{1}{2}$ —1. G, 5—4. H, 13 $\frac{1}{2}$ —1. J, 8. K, 11—1—2 Gen. Ex., 4 $\frac{1}{2}$ —1 *Credit*—Labor 70; H. Team, 11; Ox Team, 3.

August 31.—F, 27 $\frac{1}{2}$ —3—2. G, 13—7—6. H, 12—3—1. J, 5—1—1. Gen. Ex., 9—3—1 $\frac{1}{2}$. Real Es., 7 *Credit*—Labor, 73 $\frac{1}{2}$; H. Team, 17; Ox Team 11 $\frac{1}{2}$.

September 30.—B, 3 $\frac{1}{2}$. C, 3—1. D, No. 1, 5. D. No. 2, 6. G, 9—4 $\frac{1}{2}$ —3. H, 6—1. J, 9—2. Prod. 1, 13—7—6. Prod. 2, 4—3 $\frac{1}{2}$. Gen. Ex., 9 $\frac{1}{2}$ —1—2 $\frac{1}{2}$. Real Es., 7. *Credit*—Labor, 74 $\frac{3}{4}$; H. Team, 20; Ox Team, 11 $\frac{3}{4}$.

October —A, 1 $\frac{1}{2}$. B, 15—3. D No. 1, 26 $\frac{1}{2}$ —2 D No. 2, 40—2 D No. 3, 18—3. Prod. 1, 4—2. Prod. 2, 1—1. *Credit*—Labor, 106; H Team 13.

November.—E, 9 $\frac{1}{2}$ —14 $\frac{1}{2}$. M, 10—2. Prod. 1, 2. Prod. 2, 10 $\frac{1}{2}$ —9. Gen. Ex., 1 $\frac{1}{2}$. *Credit*—Labor, 33 $\frac{1}{2}$; H. Team, 25 $\frac{1}{2}$.

December.—B, 5—2 $\frac{1}{2}$. E, 6—9. H, 2 $\frac{1}{2}$ —2 $\frac{1}{2}$. M, 5 $\frac{1}{2}$ — $\frac{1}{2}$. Prod. 1, 8—7. Gen. Ex., 2 $\frac{1}{2}$ —1 $\frac{1}{2}$. Real Es., 4. *Credit*—Labor 33 $\frac{1}{2}$; H. Team 23.

January.—H, 8—8. M, 22 $\frac{1}{2}$ —0—6 $\frac{1}{2}$. Prod. 1, 2. Gen. Ex., 2—1. *Credit*—Labor, 34 $\frac{1}{2}$; H. Team, 9; Ox Team, 6 $\frac{1}{2}$.

February.—H, 24—2 $\frac{1}{2}$. M, 17—6 $\frac{1}{2}$ —4 $\frac{1}{2}$. Prod. 1, 5—4. Prod. 2, 1 $\frac{1}{2}$. *Credit*—Labor, 25 $\frac{3}{4}$; H. Team, 12 $\frac{3}{4}$; Ox Team, 4 $\frac{1}{2}$.

March.—B, 1 $\frac{1}{2}$. H, 13—6 $\frac{1}{2}$ —3. M, 19 $\frac{1}{2}$ —4—1. Prod. 1, 5—2. Prod. 2, 5—3. Gen. Ex., 1— $\frac{1}{2}$. Real Es., 2. *Credit*—Labor, 47; H. Team, 16; Ox Team, 4.

ERRATA IN TIME-TABLE.

June 6.—G, should read D No. 2. July 11.—K, *Cultivating*, should read, *Getting up Hay*. July 14—D No. 3, 1 of Horse, should be G. July 30.—H, 1 of Ox, should be omitted. Sept. 10. Prod. 2, *Oats* should be *Apples*.

SUPPLEMENT TO DAY-BOOK.

The following entries at the close of March were omitted:

I have taken from *Young Stock*, two Heifers that come in this spring, and transferred them to *Dairy*. Value, \$25 each.

The *Dairy* has produced 4 Calves, \$26; and *Horse Team* has produced a Colt, \$55, and both are transferred to *Young Stock*.

The following *Stock* have cost Labor in tending and feeding, and must be debited for the same and *Labor* credited: Ox Team No. 1, which has been stabled for feeding, \$6; *Young Stock*, \$2.50; Sheep, \$4.50; Hogs, \$10.40; Boarding Stock, \$8; Poultry, \$7.50.

ERRATA IN INVENTORY

1857—Inventory of Produce 2—30 bush. Turnips, should be 35 bush.

“	“	“	value should be	-	-	-	-	-	\$70 15
“	“	Avails of James Earl should be						-	8633 95

ERRATA IN DAY-BOOK.

April 24 —Mary Earl's Acct. for the month should be dated 30th.

Sept. 8.—27 $\frac{1}{2}$ bush. Apples a62 $\frac{1}{2}$ c., should be 25 bush. a63 $\frac{3}{4}$.

Oct. 30.—Family Estimate, Garden Stuffs should be \$13.75.

THE LEDGER.

The Ledger is the general repository of accounts, and to this, they must all be carried. The Day-Book and Time-Table are only auxiliaries, used for the purpose of ordering and condensing the entries, so that they may be posted with accuracy and facility; without them, the farmer would find the business of keeping his accounts, both tedious and perplexing, but the Ledger being the most important book, too much care cannot be taken in posting to it, that no wrong entry be made, and that all *debts* be carried to the *left* side of the account, and all *credits* to the *right*.

The Inventory being made out, the business of posting commences. It is customary and convenient, to open the accounts in their Inventory order, but in this book, they are arranged to accommodate the size of the page.

When new accounts appear in the Day-Book, they are opened also in the Ledger; thus, Ox Team No. 1, is bought, and No. 2 taken from Young Stock, and business transactions take place with McNair & Co., and these become Ledger accounts.

After the entering of the Inventory, the daily transactions recorded in Day-Book and Time-Table, are posted in their debit and credit form, with such brief explanations as will give a general understanding of them, without the trouble of referring back to the original records. These entries should be made weekly from the Day-Book, and monthly from the Time-Table, that they may not inconveniently accumulate. In April and May of this Ledger, examples are given of the correct manner of making them and the transactions of the remaining months are merely posted in monthly amounts for the reason already assigned in page 23.

Whenever you have posted your accounts from Day-Book or Time Table, turn back and examine your work, and be careful to observe that the corresponding *values* in each transaction have been entered, remembering that the one is always debtor and the other creditor, and that these are *always equal to each other*. Still further to prove the accuracy of the work, and to see that no mistakes have occurred in posting, a trial balance is taken at the close of the month. For this purpose the debits and credits of each account on the face of Ledger are added up, and the amounts transferred to

a page in the Blank Book prepared with special rulings for this purpose. See example on page 15. The design of this is to see that there is a debit for every credit, for it is obvious where this is the case, the *sum total* of the debits will equal the sum total of the credits, and when these amounts are not the same, the Ledger must be compared with the Day-Book and Time-Table for the correction of the error.

CASH.—This account being posted to, from time to time, as money is received or paid out, answers the purpose of a Cash-Book; the debit side showing the amount received, and the credit side the amount paid out; the difference between the two when the account is correct, will always be the same as the amount of Cash on hand.

BILLS RECEIVABLE.—This account is debited with notes received, and credited when they are passed out or given up, and when the two sides do not balance, (are not equal,) the debit side must be greatest, because as with Cash, we can never pass out more than we have received.

BILLS PAYABLE.—This account is credited with notes given, and debited with notes taken up, and when the two sides do not balance, the credit must be greatest, because we never pay more notes than we give. Interest on notes is debited to Interest account, and credited to cash.

PERSONAL ACCOUNTS.—As Thomas Jones, Thomas Arnold, &c., show our indebtedness to individuals, or their indebtedness to us.

PROPERTY ACCOUNTS.—These are debited with their value and interest, and credited with what they produce. As the money vested in property would yield interest if loaned, these accounts are justly charged with it, and no *strict* calculation of the profit or loss arising from the use of property can otherwise be made. In the books of the merchant, the profit or loss is generally reckoned without reference to the interest on his investment, or to the payment of his labor, and if the farmer prefers, he can *omit the debit of interest to property accounts, and the credit of unpaid labor to family*, and the closing of his books will then show the *gross result* of his farming operations. As treated in this work, the profit is merely the result of these operations, after the farmer has realized a fair per centage on his investment, and the usual rate of wages for his own labor, and the labor of his family.

INTEREST —The debit of this account shows what interest has *cost*, and the credit, what it has *produced*—the amount of interest debited, property is carried to the credit of this account.

PRODUCE ACCOUNT.—These present a perfect view of all the crops grown on the farm—how disposed of—the quantity of any kind on hand, and the waste or shrinkage by keeping over. No. 1 is used for Grain, Hay and Fodder, and No. 2 for Fruit and Roots. Each account is ruled with parallel columns on the debtor and credit sides. When a field is harvested, the amount of the crop is entered on the debtor side in its appropriate column, and the rate and value carried out at the current price. When any portion is sold or used, it is entered in the corresponding column on the credit side, and the rate and value carried out. This is continued to the end of the year, and the amount sold as presented in the credit column, together with the amount on hand, will show the shrinkage on any kind of crop, and the footing of the money columns will show the advantage or disadvantage of holding over for a rise.

For the closing up of accounts at the end of the year, see General Inventory and Profit and Loss page 18.

When any account on the Ledger is full, and requires to be carried to a new page, add the debits and credits, and transfer the amounts.

Dr.				JAMES EARL.				Cr.			
1857.				1857.							
April.	1	Liabilities as per Inv.,	285 00	April	1	His Avails as per Inv.,	1596 94				
				1858.							
				March	31	Gain, Profit and Loss Acct.	1642 27				

The general statement of Profit and Loss, page 18, shows that the net gain in conducting the business of the year, and interest on capital, has, after defraying all expenses, increased James Earl's investment \$1596.94. His account (this amount being entered to his credit, as above,) shows his present worth, and the General Inventory for 1858, page 16, proves this result to be correct.

Dr.				REAL ESTATE.				Cr.			
1857.				1858.							
April,	1	Value of Farm as per Inv.,	5088 00	March	31	Value Inv. of 1858,	5611 75				
"	30	Labor and Team, per Time T.	11 50								
May	31	" " "	18 25								
June	30	Debits for the Month,	6 50								
Aug.	31	" " "	7 00								
Sept.	30	" " "	7 00								
Oct.	31	" " "	400 00								
Dec.	"	" " "	4 00								
1858.											
Jan.	31	" " "	16 00								
Feb.	28	" " "	37 50								
March	31	" " "	2 00								
"	"	Int. on value of Lot N,	14 00								
			5611 75							5611 75	

The process of closing an account is presented in this and the following account, and may be applied to other accounts as they arise. The results, as exhibited in General Inventory and statement of Profit and Loss, are altogether independent of this process. A few accounts are closed, but the most of them are left open for the better understanding of their nature and use.

Dr.				FURNITURE.				Cr.			
1857.				1858.							
April	1	Value as per Inv.,	432 00	March	31	Value Inv. of 1858,	470 00				
June	30	Debits for the Month,	3 50	"	"	Loss, Profit and Loss Acc.,	7 60				
Oct.	31	" " "	35 30								
1858.											
March	31	" " "	6 80								
			477 60							477 60	

Dr.				IMPLEMENTS.				Cr.			
1857.				1858.							
April	1	Value as per Inv.,	515 00	March	31	Value Inv. of 1858,	515 00				
May	27	Cash, Repairs,	2 85								
June	30	Debits for the Month,	1 00								
July	31	" " "	4 75								
Aug.	"	" " "	1 50								
Sept.	30	" " "	4 25								
1858.											
Jan.	31	" " "	7 25								
March	"	Interest on Value,	36 05								

Dr.

CASH.

Cr.

1857.				1857.			
April	1	Amount, as per Inv.,	92 00	April	8	Field K, Plaster,	3 75
"	8	Dairy,	11 10	"	"	Field J, Grass Seed,	14 50
"	"	Poultry,	5 00	"	"	Family, Groceries, &c.,	11 61
"	"	Produce No. 2,	15 00	"	"	Ox Team, Purchase,	60 00
"	24	"	32 00	"	24	Family, Books, &c.,	15 90
"	"	Horse Team, for Jerry,	60 00	May	4	" Groceries, &c.,	6 10
May	4	Produce 1, Dairy and Poultry	36 00	"	"	Horse Team, Shoeing,	1 25
"	27	Dairy and Poultry,	5 84	"	27	Thomas Jones, on Acct.,	12 00
June	30	Debits for the Month,	46 04	"	"	Implements, Repairs,	2 85
July	31	" " "	16 65	"	"	Family, Stationery, &c.,	3 98
Aug.	"	" " "	94 29	"	31	" J. Holden's Wages,	4 00
Sept.	30	" " "	590 82	June	30	Credits for the Month,	30 00
Oct.	31	" " "	121 00	July	31	" " "	78 65
Nov.	30	" " "	196 00	Aug.	"	" " "	68 49
Dec.	31	" " "	237 30	Sept.	30	" " "	269 38
1858.				Oct.	31	" " "	479 05
Jan.	31	" " "	175 13	Nov.	30	" " "	226 00
Feb.	28	" " "	40 80	Dec.	31	" " "	9 00
March	31	" " "	197 38	1858.			
				Jan.	31	" " "	343 90
				Feb.	28	" " "	12 50
				March	31	" " "	165 60
				"	"	Balance on Hand,	153 84
			1972 35				1972 35

Dr.

BILLS RECEIVABLE.

Cr.

1857.				1857.			
April	1	Two Mortgages, per Inv.,	800 00	Aug.	31	Credits for the Month,	60 00
"	24	Horse Team for Jerry,	60 00	Sept.	30	" " "	28 00
Aug.	31	Debits for the Month,	28 00	Oct.	31	" " "	75 00
1858.				1858.			
Jan.	31	" " "	50 00	Jan.	31	" " "	100 00
March	"	" " "	600 00				

Dr.

BILLS PAYABLE.

Cr.

1857.				1857.			
July	31	Debits for the Month,	60 00	April	1	Note as per Inv.,	235 00
				"	8	Ox Team, Purchase,	60 00

Dr.		FAMILY.				Cr.	
1857.				1857.			
April	1	Provisions, as per Inv.,	83 00	Sept.	30	Credits for the Month,	15 50
"	8	Cash, Groceries, &c.,	11 61	Dec.	31	" "	11 00
"	24	" Books, School Bill, &c.	15 99	1858.			
"	30	Dairy, Monthly Account,	7 12	Jan.	"	"	4 00
"	"	Poultry, " "	1 08	March	"	"	598 90
"	"	Produce 2, " "	16 50	"	"	<i>Family Stores per Inv. 1858,</i>	125 00
May	4	Produce 1, Wheat and Corn,	17 40	"	"	<i>Loss, Profit and Loss Acct.,</i>	233 05
"	"	Cash, Clothing, &c.,	6 10				
"	27	Cash, Stationery, &c.,	3 98				
"	31	Dairy, Monthly Account,	4 96				
"	"	Poultry, " "	2 60				
"	"	Cash, J. Holden's Wages,	4 00				
June	30	Debits for the Month,	34 65				
July	31	" "	48 96				
Aug.	"	" "	44 88				
Sept.	30	" "	154 78				
Oct.	31	" "	72 86				
Nov.	30	" "	23 43				
Dec.	31	" "	122 88				
1858.							
Jan.	"	" "	71 93				
Feb.	28	" "	26 11				
March	31	" "	94 60				
"	"	Int. on House and Furniture,	124 74				
			987 45				987 45

Dr.		GENERAL EXPENSE.				Cr.	
1857.				1858.			
April	30	Lab. and Team, Time-Table,	1 50	March	31	<i>Loss, Profit and Loss Acct.,</i>	59 01
May	31	" "	8 25				
June	30	Debits for the Month,	5 50				
July	31	" "	5 50				
Aug.	"	" "	13 13				
Sept.	30	" "	12 38				
Oct.	31	" "	2 75				
Nov.	30	" "	1 50				
Dec.	31	" "	4 00				
1858.							
Jan.	31	" "	3 00				
March	"	" "	1 50				
			59 01				59 01

Dr.		INTEREST.				Cr.	
1857.				1857.			
Sept.	30	Debits for the Month,	1 75	Oct.	30	Credits for the Month,	21 00
1858.				1858.			
March	31	" "	16 45	Jan.	31	" "	37 63
				March	31	Int. on Investment,	505 75

Dr.		MANURE.				Cr.	
1857.				1847.			
April	1	Value, 150 Loads per Inv.,	22 50	May	10	Field D No. 2, 100 Loads,	15 00
1858.				"	20	" " 1, 45 "	6 75
March	31	Int. on Barn and Stables,	39 20	July	30	Credits for the Month,	2 40
				Dec.	31	" "	4 80
				1858.			
				March	31	Value, per Inv. of 1858,	32 75
			61 70				61 70

Dr.		THOMAS JONES.				Cr.	
1857.				1857.			
May	27	Cash and Dairy,	15 60	April	1	Due him as per Inv.,	50 00
June	30	Debits for the Month,	9 00	Sept.	30	Credits for the Month,	84 00
July	31	" "	15 50				00
Aug.	31	" "	14 00				
Sept.	30	" "	79 99				
			134 00				134 00
Nov.	30	Debits for the Month,	26 00	1858.			
				March	31	Credits for the Month,	84 00

In September it will be seen that there was a settlement in full with Thomas Jones, and lines are drawn at that date, and both sides added up, to denote this fact, and to render it unnecessary to go over the items, prior to that time, in any future settlement. If the old Ledger is continued, leave the account open, or if a new Ledger is opened, transfer the amounts of debits and credits, and continue the account.

Dr.		THOMAS ARNOLD.				Cr.	
1857.				1858.			
April	1	Balance, as per Inv.,	50 00	Jan.	31	Credits for the Month,	50 00
1858.							
March	31	Debits for the Month,	77 14				

Dr.

PRODUCE No. 1.

			WHEAT.	CORN.	OATS.	BARLEY.	HAY.	VAL. OF FODDER.	PRICE	
1857.										
April	1	Amount on hand as per Inv.,	16						1 25	2 00
"	..	" " "		124					50	62 00
"	..	" " "			100				40	40 00
"	..	" " "					13000		8 50	55 25
"	..	" " "						7 50		7 50
"	30	Labor, Time-Table,								1 50
May	31	" and Team, Time-Table,								2 00
July	..	Debits for the Month,								156 00
Aug.	..	" " "					52000			175 00
Sept.	30	" " "	400		480	260	50000	72 50		857 00
Oct.	31	" " "		623				20		275 20
Nov.	30	" " "								2 00
Dec.	31	" " "								15 00
1858.		" " "								
Jan.	31	" " "								2 00
Feb.	28	" " "								9 00
March	31	" " "						10 00		4 00
			416	747	580	260	115000	110 00		1683 45

In the parallel column of this account, Grains, Hay and Fodder are entered. On the left, the first entry is taken from the Inventory of 1857, and shows the quantity of each kind of Grain &c., on hand at that time, and then the crops in succession as they are harvested, are entered at their estimated value. Fodder is entered at its cash value, instead of in quantity, and is estimated at 5 acres straw to 1 acre of hay.

On the right the sales are entered as they occur, and at the end of the year, the quantity on hand, as shown in the General Inv. page 16. The credit columns for grain compared with the debit columns, show waste and shrinkage, and this loss appears by the entry on the credit side. The fodder shows a gain, its estimated value in feeding out having been greater than its estimated worth when harvested, and the difference is entered on the left hand column to denote gain.

Dr.

J. McNAIR & CO.

Cr.

1857.				1857.			
Nov.	30	Debits for the Month,	200 00	March	31	Credits for the Month,	500 00
1858.							
Jan.	31	" "	300 00				
			500 00				500 00

PRODUCE No. 1.

Cr.

1857.			WHEAT.	CORN.	OATS.	BARLEY.	HAY.	VAL. OF FODDER.	PRICE	
April	24	Field J. Seed,			32				50	16 00
"	30	Horse Team, Monthly Acct.,					3000		9 00	13 50
"	"	" " " "			25				40	1 00
"	"	Ox Team, " "					700		9 00	3 15
"	"	" " " "			6				55	3 30
"	"	Dairy, " "					5500		8 00	22 00
"	"	Young Stock, " "						7 50		7 50
"	"	Sheep, " "					1000		8 00	4 00
May	4	Family, " "	12						1 25	15 00
"	"	Feed, Corn Exchanged,		4					60	2 40
"	"	Cash, " "		29 1/2					60	17 70
"	12	Field D. No. 2,		30					70	21 00
"	31	Horse Team, Monthly Acct.		1 1/4					1 00	1 25
"	"	" " " "				20	1500		9 00	6 75
"	"	Ox Team, " "					1200		40	8 00
"	"	" " " "							9 00	5 40
"	"	Hogs, estimate for 2 Months,		10					60	6 00
"	"	Poultry, " "		16					60	9 60
"	"	" " " "		9					60	5 40
June	30	Credits for the Month,		10	22		1000			22 00
July	31	" " " "		1	2		500			4 15
Aug.	"	" " " "	4	6						8 80
Sept.	30	" " " "	22 1/2		72	80	6100			384 20
Oct.	31	" " " "		20	15		1000			18 50
Nov.	30	" " " "		5 1/2	40		1500			36 20
Dec.	31	" " " "		12	156		11360			108 73
1858.										
Feb.	28	" " " "		25				15		27 50
March	31	" " " "		126	60		59985	69 50		366 58
		Amount on hand, per Inv. 1858,	150						70	105 00
		" " " "		247 1/2					37 1/2	92 73
		" " " "			300				28	84 00
		" " " "				175			60	105 00
		" " " "					20000		7 00	70 00
		" " " "						18		18 00
		Waste and Shrinkage,	8 1/2	10	12	5	655			
		Loss on Estimated Value,								54 12
			416	747	580	260	115090	110 00		1682 45

By comparing the debit and credit money columns, the estimated value is shown to exceed the proceeds from sales and present value, \$54.12, and this loss is entered on the credit side and all the columns added to prove the accuracy of the work. These entries of profit or loss are merely made on the debit and credit sides so that they may appear, and that the accuracy of the work may be proved when the columns are added. Gain or loss on the crops is shown in the accounts with the fields themselves. See general statement of Profit and Loss.

Dr.

R. WOODGROVE.

Cr.

1858.				1858.			
March 31	Debits for the Month,		32 14	March 31	<i>Due as per Inv. of 1858,</i>		3 14

Dr.

PRODUCE No. 2.

			POTATC'S	TURNIPS.	APPLES.	VAL. OF GARDEN.	PRICE		
1857.									
April	1	Amount on hand, as per Inventory,			22		75		16 50
"	"	" " " "	65				75		48 75
"	"	" " " "		35			14		4 90
"	30	Labor and Team, Time-Table,							3 50
June	30	Debits for the Month,				2 15			2 15
July	31	" "			2	12 90			14 15
Aug.	"	" "			26	8 00			30 74
Sept.	30	" "	105		105				107 25
Oct.	31	" "	456	638	520	13 75			451 11
Nov.	30	" "							19 50
1858.									
Feb.	28	" "							1 50
March	31	" "							11 00
		Gain on Estimated Value,							12 46
			626	673	675	36 80			723 51

The process described in Produce Account No. 1, is here adopted in regard to Roots, Fruits and Garden Vegetables. The garden products are entered in money value, as they are various in kind. This account shows a gain, which is carried to the credit side. See note on Produce Account No. 1.

Dr.

FEED.

Cr.

1857.			11 25	1857.					
April	1	Value, as per Inv.,	17 70	April	30	Dairy, Monthly Acct.,			7 50
May	4	Produce No. 1, Exchange,	13 50	"	"	Sheep, " "			1 88
June	30	Debits for the Month,	27 00	May	31	Dairy, " "			3 75
Aug.	31	" "	17 00	"	"	Sheep, " "			1 13
Sept.	30	" "		June	30	Credits for the Month,			4 13
				July	31	" "			15 00
				Aug.	"	" "			15 00
				Sept.	30	" "			10 50
				Oct.	31	" "			3 00
				Nov.	30	" "			2 25
				1858.					
				March	31	" "			21 00

PRODUCE No. 2.

Cr.

			POTATO'S	TURNIPS.	APPLES.	VAL. OF GARDEN.	PRICE	
1857.								
April	8	Cash,			5		1 00	5 00
"	"	"	10				1 00	10 00
"	24	"	20				1 00	20 00
"	"	"			10		1 20	12 00
"	"	Family,	15				75	11 25
"	"	"			7		75	5 25
"	30	Young Stock, Monthly Acct.,		30			14	4 20
May	20	Field D No. 1, Seed,	20				75	15 00
June	30	Credits for the Month,				2 15		2 15
July	31	"			2	12 90		14 15
Aug.	"	"			26	8 00		30 74
Sept.	30	"	105		105			104 32
Oct.	31	"	25	5	120	13 75		84 85
Nov.	30	"	150	35	290			202 35
Dec.	31	"	6	40				6 30
1858.								
March	31	"	10	486	30			78 75
		Amount on hand as per Inv., 1858,			76		50	38 00
		"	240				30	72 00
		"		60			12	7 20
		Waste,	25	17	4			
			626	673	675	36 80		723 51

Dr.

LABOR.

Cr.

1857.				1857.				
July.	31	Debits for the Month.	3 75	April	30	Time-Table for the Month,		59 50
Aug.	"	"	5 00	May	31	"	"	64 00
Sept.	3	"	87 25	June	30	"	"	69 00
Oct.	31	"	26 00	July	31	"	"	70 00
1858.		"		Aug.	"	"	"	73 50
March	31		662 65	Sept.	30	"	"	74 75
				Oct.	31	"	"	106 00
				Nov.	30	"	"	33 50
				Dec.	31	"	and D. B.	38 50
				1858.				
				Jan.	31	"	"	34 25
				Feb.	28	"	"	25 75
				March	31	"	"	135 90

The debit to labor in March, consist of the wages of Thos. Jones, \$84, and the balance \$578.63, is carried to Family Ac-
count, being the credit to the Family for their labor during the year. See Day Book, page 34.

Dr.			HORSE TEAM.		Cr.		
1857.				1857.			
April	1	Value of 4 Horses, per Inv.,	390 00	April	24	Cash and Bills Receivable,	120 00
"	30	Prod. No. 1, Monthly Acct.,	23 50	"	30	Labor, Time-Table,	24 75
May	4	Cash, Shoeing,	1 25	May	31	"	13 00
"	31	Prod. No. 1, Monthly Acct.,	14 75	June	30	Credits for the Month,	16 75
"	"	Field E. "	1 75	July	31	"	11 00
June	30	Debits for the Month,	16 25	Aug.	"	"	17 00
July	31	"	11 50	Sept.	30	"	20 00
Aug.	"	"	11 50	Oct.	31	"	13 00
Sept.	30	"	13 90	Nov.	30	"	25 25
Oct.	31	"	12 75	Dec.	31	"	24 00
Nov.	30	"	15 50	1858.			
1858.				Jan.	31	"	9 00
March	31	"	74 00	Feb.	28	"	22 75
"	"	Interest on value,	18 90	March	31	"	71 00
"	"	Gain, Profit and Loss Acct.,	46 95	"	"	Value per Inv. of 1858,	265 00
			652 50				652 50

Dr.			OX TEAM No. 1.		Cr.		
1857.				1857.			
April	8	Cash and Bills Payable,	120 00	April	30	Labor, Time-Table,	6 38
"	30	Prod. No. 1, Monthly Acct.,	6 45	May	31	"	10 50
May	31	"	11 40	June	30	Credits for the Month,	9 38
June.	30	Debits for the Month,	7 63	July	31	"	2 25
July.	31	"	4 00	Aug.	"	"	8 63
Aug.	"	"	7 00	Sept.	30	"	8 63
Sept.	30	"	8 25	1858.			
Oct.	31	"	9 00	March	31	Value per Inv. of 1858,	165 00
Nov.	30	"	8 60	"	"	Loss, Profit and Loss Acct.,	39 46
1858.							
March	31	"	59 50				
"	"	Interest on value,	8 40				
			250 23				250 23

This team was taken up for feeding in October, and a new account might have been opened, and the working account closed. The result of feeding on a falling market, shows a loss.

Dr.			OX TEAM No. 2.		Cr.		
1856.				1858.			
Jan.	31	Debits for the Month,	60 00	Jan.	31	Credits for the Month,	4 88
March	"	"	17 75	Feb.	28	"	3 38
				March	31	"	3 00
				"	"	Value per Inv. of 1858,	65 00

This team was taken from Young Stock in January.

Dr.

DAIRY.

Cr.

1857.				1857.			Lbs.	
April	1	Value 8 Cows, per Inv.,	315 00				But.	
"	30	Monthly Account.	29 50	April,	8	Cash, Butter and Veal,	20	11 10
May	31	"	15 00	"	30	Family, Monthly Acct.,	25	7 12
June	30	Debits for the Month,	9 00	May	4	Cash, " "	60	10 80
July	31	"	9 00	"	27	" " "	9	1 44
Aug.	"	"	9 00	"	"	Thos. Jones, Exc.	20	3 60
Sept.	30	"	8 00	"	31	Family, Butter, &c.,	26	4 90
Oct.	31	"	9 75	June	30	Credits for the Month,	226	36 20
Nov.	30	"	9 43	July	31	"	70	11 90
Dec.	31	"	13	Aug.	"	"	34	34 10
1858.				Sept.	30	"	225	94 75
March	31	"	187 00	Oct.	31	"	35	7 30
"	"	Int. on value,	22 05	Nov.	30	"	20	4 20
				Dec.	31	"	14	3 10
				1858.				
				Jan.	31	"	156	31 40
				Feb.	28	"	76	20 34
				March	31	"	522	122 40
						Milk & Cheese for year,	305	
						Amount for the year,	1847	
						Value, per Inv. of 1858,		306 00

Dairy Account shows the quantity of Butter made during the season. The Cheese is converted into its equivalent in Butter, estimating 8 lbs. Cheese as equal to 3 lbs. Butter. The Family Account for Milk is reduced into its equivalent of Butter, allowing 10 to 12 quarts for 1 lb. Butter.

Dr.

POULTRY.

Cr.

1857.				1857.			Doz.	
April	1	Fowls as per Inv.,	18 00				Eg's	
May	21	Prod. No. 1, 2 months,	5 40	April	8	Cash,	25	5 00
June	30	Debits for the Month,	1 65	"	30	Family, Monthly Acct.,	6	1 08
July	31	"	1 65	May	4	Cash,	30	4 20
Sept.	30	"	2 00	"	27	"	40	4 40
1858.				"	31	Family, Monthly Acct.,	20	2 60
March	31	"	21 90	June	30	Credits for the Month,	72	7 84
"	"	Int. on Value,	1 26	July	31	"	25	2 50
"	"	Gain, as per Inv. of 1858,	72 33	Aug.	"	"	45	14 29
				Sept.	30	"	45	12 00
				Oct.	31	"	10	3 40
				Nov.	30	"	10	11 28
				Dec.	31	"	26	14 43
				1858.				
				Jan.	31	"	11	8 40
				Feb.	28	"	16	4 32
				March	31	"	35	8 45
				March	"	Amount for the year,	416	
						Value, per Inv. of 1858		20
			124 19					124 19

Dr.

GARDEN A.

Cr.

1856.					1857.				
April	30	Labor and Team, Time-Tab.	3 00	June	30	Credits for the Month,	2 15		
May	31	" " "	3 00	July	31	" " "	8 00		
June	30	Debits for the Month,	1 00	Aug.	..	" " "	13 75		
July	31	" " "	1 00	Oct.	..	" " "	12 90		
Oct.	..	" " "	1 50						
1858.									
March	31	Int. on Value,	7 00						
"	..	Gain, Profit and Loss Acct.	20 30						
			36 80					36 80	

Dr.

ORCHARD B.

Cr.

1857.				1857.					
April	30	Labor, Time-Table,	1 50	July	31	Credits for the Month,	1 25		
Sept.	..	Debits for the Month,	3 25	Aug.	..	" " "	22 74		
Oct.	31	" " "	18 00	Sept.	30	" " "	55 65		
Dec.	..	" " "	12 30	Oct.	31	" " "	198 00		
1858.									
March	31	" " "	1 50						
"	..	Int. on Value,	23 10						

Dr.

FIELD C.

Cr.

1857.				1857.					
April	1	Value, Barley as per Inv.,	54 00	Aug.	31	Credits for the Month,	1 25		
July	31	Debits for the Month,	11 50	Sept.	20	" " "	171 00		
Sept.	30	" " "	9 20						
1858.									
March	31	Int. on Value,	14 00						

Dr.

FIELD D No. 1.

Cr.

1857.				1857.					
April	1	Labor and Manure, Inv.,	21 00	Sept.	30	Credits for the Month,	44 10		
May	20	Manure, 45 Loads,	21 75	Oct.	31	" " "	136 80		
"	31	Labor and Team, Time-Tab.	22 25						
June	30	Debits for the Month,	5 50						
July	31	" " "	1 50						
Sept.	30	" " "	5 00						
Oct.	31	" " "	28 50						
1858.									
March	31	Interest on Value,	4 20						

Dr.

WOOD LOT M.

Cr.

1857.				1857.					
Nov.	30	Debits for the Month,	12 00	Nov.	30	Credits for the Month,	10 00		
Dec.	31	" " "	6 00	Dec.	31	" " "	46 25		
1858.				1858.					
Jan.	31	" " "	27 13	Jan.	31	" " "	42 50		
Feb.	28	" " "	26 88	Feb.	28	" " "	38 75		
March	31	" " "	24 25	March	31	" " "	69 60		
"	..	Interest on Value,	27 30						

Dr.		FIELD D No. 2.				Cr.	
1857.				1857.			
April	1	Labor and Manure, Inv.,	72 00	Oct.	31	Credits for the Month,	293 20
"	30	Labor and Team, Time-Tab.	25 13				
May	10	Manure, 100 Loads,	15 00				
"	12	Prod. 1, Seed Corn,	1 25				
"	31	Labor and Team, Time-Tab.	22 75				
June	30	Debits for the Month,	12 75				
July	31	" "	8 50				
Sept.	30	" "	6 00				
Oct.	31	" "	42 00				
1858.							
March	31	Interest on value,	14 00				
		<i>Gain, Profit and Loss Acct.,</i>	73 82				
			293 20				293 20

Dr.		FIELD D No. 3.				Cr.	
1457.				1857.			
July	31	Debits for the Month,	12 90	Oct.	31	Credits for the Month,	76 56
Oct.	"	" " "	21 00			" "	
March	"	Interest on value,	1 40				

Dr.		FIELD E.				Cr.	
1857.				1857.			
Nov.	30	Debits for the Month,	23 75	May	31	Horse Team Pasture,	1 75
Dec.	31	" "	15 00	"	"	Dairy,	11 25
1858.				June	30	Credits for the Month,	13 25
March	31	Interest on Value,	22 40	July	31	" "	12 50
				Aug.	"	" "	3 88
				Sept.	30	" "	8 25
				Oct.	31	" "	2 00
				Nov.	30	" "	2 00
				Dec.	31	" "	3 00
				1858.			
				March	31	Inv., Labor for Spring Crop,	38 75

Dr.		BOARDING STOCK.				Cr.	
1858.				1858.			
March	31	Debits for the Month,	96 00	March	31	Credits for the Month,	109 28

Dr.		FIELD L.				Cr.	
1858.				1858.			
March	31	Interest on Value,	4 62	March	31	Credits for the Month,	22 00

Dr.		FIELD F.				Cr.	
1857.				1857.			
April	30	Lab. and Team, Time-Table,	2 00	Aug.	31	Credits for the Month,	175 00
Aug.	31	Debits for the Month,	32 00	Nov.	30	" "	2 00
1858.							
March	31	Interest on value,	20 16				
		<i>Gain, Profit and Loss Acct.</i>	122 84				
			177 00				177 00

Dr.		FIELD G.				Cr.	
1857.				1858.			
May	31	Labor and Team, Time-Tab.	7 50	March	31	Wheat on Ground, Inv. 1858	155 35
June	30	Debits for the Month,	51 88				
July	31	" "	9 00				
Aug.	"	" "	24 50				
Sept.	30	" "	44 55				
1858.							
March	31	Interest on Value,	17 92				

Dr.		FIELD H.				Cr.	
1857.				1857.			
April	1	Wheat on Ground, Inv.,	108 30	Sept.	30	Credits for the Month,	490 00
May	31	Labor, Time-Table,	2 50	1858.			
July	"	Debits for the Month,	14 50	March	31	Manure and Labor, Inv.,	62 25
Aug.	"	" "	15 75				
Sept.	30	" "	23 00				
Dec.	31	" "	5 00				
1858.							
Jan.	31	" "	16 00				
Feb.	28	" "	19 50				
March	31	" "	21 75				
"	"	Interest on Value,	22 40				
"	"	<i>Gain, Profit and Loss,</i>	303 55				
			552 25				552 25

Dr.		FIELD J.				Cr.	
1857.				1858.			
April	8	Cash, Clover and Timothy,	14 50	Sept.	30	Credits for the Month,	171 50
"	24	Prod. No. 1, Seed Oats,	16 00	Dec.	31	" "	12 50
"	30	Labor & Team, Time-Table,	39 00				
May	31	" " "	1 00				
July	"	Debits for the Month,	8 00				
Aug.	"	" "	6 75				
Sept.	30	" "	23 00				
1858.							
March	31	Interest on Value,	22 40				

Dr.

FIELD K.

Cr.

1857.				1857.			
April	8	Cash, Plaster,	3 75	July	31	Credits for the Month,	160 50
"	30	Labor and Team, Time-Tab.	2 00	Aug.	"	"	10 12
June	30	Debits for the Month,	12 00	Sept.	30	"	4 00
July	31	"	13 50	Oct.	31	"	7 50
1858.				Nov.	30	"	4 00
March	31	Interest on Value,	21 56				
"	"	Gain, Profit and Loss,	133 31				
			186 12				186 12

TRIAL BALANCE,

APRIL 30TH, 1857.

DEBITS.	NAMES OF ACCOUNTS.	CREDITS.
285 00	James Earl,	8633 95
5099 50	Real Estate,	
432 00	Furniture,	
515 00	Implements,	
215 10	Cash,	105 76
860 00	Bills Receivable,	
	Bills Payable,	295 00
135 21	Family,	
1 50	General Expense,	
22 50	Manure,	
	Thomas Jones,	50 00
50 00	Thomas Arnold,	
186 25	Produce No. 1,	79 45
73 65	Produce No. 2,	67 70
11 25	Feed Account,	9 38
	Labor,	59 50
413 50	Horse Team Account,	144 75
126 45	Ox Team Account,	6 38
344 50	Dairy Account,	18 22
18 00	Poultry,	6 08
187 70	Young Stock,	
60 88	Sheep Account,	
76 00	Hog Account,	
3 00	A,	
1 50	B,	
54 00	C,	
21 00	D No. 1,	
97 13	D No. 2,	
2 00	F,	
108 30	H,	
69 50	J,	
5 75	K,	
9476 17		9476 17

TRIAL BALANCE,

MARCH 31ST, 1858.

DEBITS.	NAMES OF ACCOUNTS.	CREDITS.
285 00	James Earl,	8633 95
5611 75	Real Estate,	
477 60	Furniture,	
572 65	Implements,	
1972 35	Cash,	1818 51
1538 00	Bills Receivable,	263 00
60 00	Bills Payable,	295 00
987 45	Family,	629 40
59 01	General Expense,	
18 20	Interest,	564 38
61 70	Manure,	28 95
26 00	Thomas Jones,	84 00
77 14	Thomas Arnold,	
1683 45	Produce No. 1,	1154 61
711 05	Produce No. 2,	606 31
86 45	Feed Account,	85 14
605 55	Horse Team Acct.,	387 50
250 23	Ox Team Acct.,	45 77
77 75	Ox Team No. 2,	11 26
635 73	Dairy Acct.,	404 65
51 86	Poultry,	104 19
359 22	Young Stock,	162 00
107 61	Sheep Acct.,	44 64
219 47	Hogs,	229 60
16 50	A,	36 80
59 65	B,	277 64
88 70	C,	172 25
109 70	D No. 1,	180 90
219 38	D No. 2,	293 20
35 30	D No. 3,	76 56
61 15	E,	57 88
54 16	F,	177 00
155 35	G,	
248 70	H,	490 00
130 65	J,	184 00
52 31	K,	186 12
4 62	L,	22 00
123 56	M,	207 10
32 14	Robert Woodgrove,	
96 00	Boarding Stock,	109 28
17923 59		17923 59

When an account is equal in its debits and credits, it is not necessary to enter it in the Trial Balance, as it would not vary the result.

In the Trial Balance of March, the amounts for the year are entered, but the Trial Balance having been taken monthly, the general Trial Balance for the year is unnecessary.

INVENTORY,

OR

STATEMENT OF AVAILS AND LIABILITIES.

MARCH 31st, 1858.

When the Books were opened on the first of April, a valuation of property was made out, and Avails and Liabilities arranged under the head of *Inventory*, and as it is desirable now, at the close of March, to ascertain the result of the farming operations of the year, we proceed to make a new estimate of property at its present value, and arrange it in order as in April.

This is a plain, common sense transaction, *unconnected with any system of balancing or closing Ledger Accounts*, and that Book is used only in the making out of this Inventory, to ascertain the balances of Bills Receivable, Bills Payable and Personal Accounts. The difference between the Avails and Liabilities, is the farmer's net worth, and compared with his net worth in April, will show whether his avails have been increased or diminished, and how much.

James Earl's Avails are—

<i>Real Estate</i> —Comprising the following Divisions:				
House and Lot,	1350	00		
Barn and Sheds,	575	00		
Garden A,	100	00		
Orchard B,	350	00		
Field C,	200	00		
“ D,	280	00		
“ E,	320	00		
“ F,	288	00		
“ G,	288	00		
“ H,	320	00		
“ J,	320	00		
“ K,	300	00		
“ L,	66	00		
“ M,	390	00		
“ N,	425	00		
Boards and Rails,	39	75	5611	75
<i>Implements</i> —As per special Inventory,			515	00
<i>Furniture</i> —As per Mary Earl's Inventory,			470	00
<i>Family Stores</i> —“ “ “			125	00
<i>Horse Team</i> —Value of 3 Horses,			265	00
Ox “ “ Fatting Cattle,			165	00
“ “ “ Young Team,			65	00
<i>Dairy</i> —“ 10 Cows			306	00
<i>Young Stock</i> —“ 8 Young Cattle and a Colt,			140	00
<i>Sheep</i> —“ 17 Sheep and 13 Lambs,			72	00
<i>Hogs</i> —“ 8 Store Hogs and 2 Sows,			65	00
<i>Poultry</i> —“ 70 Hens and 6 Turkeys,			20	00
<i>Produce No. 1</i> —150 bush. Wheat, a70c.	105	00		
247½ “ Corn, a37½c.	92	72		
300 “ Oats, a28c.	84	00		
175 “ Barley, a60c.	105	00		
Fodder,	18	00		
20,000 lbs. Hay, (10 tons,) a\$7,	70	00	474	72
Amount carried forward,			8294	47

INVENTORY—Continued.

	Amount brought forward,		8294 47
<i>Produce No. 2</i> —240 bush. Potatoes, a30c.	72 00		
76 “ Apples, a50c.	38 00		
60 “ Turnips, a12c.	7 20		117 20
G Breaking, Fallowing and Sowing,			155 35
E Breaking up for Spring Crop,			38 75
H Manuring and Plowing,			62 25
<i>Manure</i> —For value,			32 75
<i>Cash</i> —Amount on hand			153 84
<i>Bills Receivable</i> —Amount on hand,			1275 00
<i>Thomas Arnold</i> —For his indebtedness,			77 14
<i>Robt. Woodgrove</i> —“ “			32 14
Amount of Avails,			10238 89
LIABILITIES.			
<i>Bills Payable</i> —Note as per Ledger,	235 00		
<i>Thomas Jones</i> —Due to him,	58 00		293 00
Net worth March 31st, 1858,			9945 89
“ “ April 1st, 1857,			8348 95
Increase,			1596 94

This Inventory would form the opening accounts of the new Ledger, in continuing the Books of Mable Grove Farm for the ensuing year.

P R O F I T A N D L O S S .

It is desirable not only to ascertain the present worth of the farmer, but also the sources of his gain or loss.

It will be obvious that we can determine nothing in regard to the Profit or Loss arising from any species of property, unless in connection with what it has cost and produced. We also consider its present value—thus by turning to Horse Team Account, it will be found debited with its value in 1857, \$395, and with its cost during the year. On the other hand, it has been credited with the colt and team work, and to this must be added its present value from the Inventory of 1858, which is \$265; and now the debits and credits compared, show an excess of credits amounting to \$47.95, which amount is *gain*.

The value of the Fields having been entered to Real Estate, these are only to be credited from the Inventory, where a crop is in the ground, or preparation has been made for one; in this case, an investment has been made, the result of which is to be *hereafter* realized; and consequently, such field is to be credited with the value of the labor, seed, &c., bestowed upon it.

By carrying the loss to the credit and the gain to the debit of the accounts to which they belong in the Ledger, the two sides will equal each other. This is termed *balancing*. Several examples of this are given, but the process is wholly unnecessary, and unconnected with any practical result.

Statement of Gain and Loss on Property and Expense Accounts for the Year.

LEDG'R PAGE.	TITLE OF ACCOUNTS.	MARCH 31st, 1858.	DEB. AND CRED. COMPARED.	DIFFERENCE CARRIED OUT.	
				NET LOSS.	NET GAIN.
1	Furniture Account,	Amount of Debits,	477 60		
		“ Credits,	470 00	7 60	
1	Implement Account,	Amount of Debits,	572 65		
		“ Credits,	515 00	57 65	
3	Family Account,	Amount of Debits,	987 45		
		“ Credits,	754 40	233 05	
3	General Expense,	Amount of Debits,	59 01		
		“ Credits,	0 00	59 01	
4	Interest Account,	Amount of Credits,	564 38		
		“ Debits,	18 20		546 18
5	Produce Acct. No. 1,	Amount of Debits,	1683 45		
		“ Credits,	1629 33	54 12	
7	Produce Acct. No. 2,	Amount of Credits,	723 51		
		“ Debits,	711 05		12 46
7	Feed Account,	Amount of Debits,	86 45		
		“ Credits,	85 14	1 31	
9	Horse Team Account, ...	Amount of Credits,	652 50		
		“ Debits,	605 55		46 95
9	Ox Team Account,	Amount of Debits,	250 23		
		“ Credits,	210 77	39 46	
9	Ox Team No. 2,	Amount of Debits,	77 75		
		“ Credits,	76 26	1 49	
11	Young Stock Account, ..	Amount of Debits,	359 22		
		“ Credits,	302 00	57 22	
11	Sheep Account,	Amount of Credits,	116 64		
		“ Debits,	107 61		9 03
11	Hog Account,	Amount of Credits,	294 60		
		“ Debits,	219 47		75 13
10	Poultry Account,	Amount of Credits,	124 19		
		“ Debits,	51 86		72 33
10	Dairy Account,	Amount of Credits,	710 65		
		“ Debits,	635 73		74 92
		Amount carried forward,		510 91	837 00

STATEMENT OF GAIN AND LOSS—CONTINUED.

LEDG'R PAGE.	TITLE OF ACCOUNTS.	MARCH 31ST, 1858.	DBS. AND CRS. COMPARED.	DIFFERENCE CARRIED OUT.	
				NET LOSS.	NET GAIN.
		Amount bro't forward,		510 91	837 00
12	Garden A,	Amount of Credits,	36 80		
		" Debits,	16 50		20 30
12	Orchard B,	Amount of Credits,	277 64		
		" Debits,	59 65		217 99
12	Field C,	Amount of Credits,	172 25		
		" Debits,	88 70		83 55
12	Field D No. 1,	Amount of Credits,	180 90		
	Potatoe Crop,	" Debits,	109 70		71 20
13	Field D No. 2,	Amount of Credits,	293 20		
	Corn Crop,	" Debits,	219 38		73 82
13	Field D No. 3,	Amount of Credits,	76 56		
	Turnip Crop,	" Debits,	35 30		41 26
13	Field E,	Amount of Debits,	96 63		
		" Credits,	61 15		35 48
14	Field F,	Amount of Credits,	177 00		
		" Debits,	54 16		122 84
14	Field H,	Amount of Credits,	552 25		
		" Debits,	248 70		303 55
14	Field J,	Amount of Credits,	184 00		
		" Debits,	130 65		53 35
15	Field K,	Amount of Credits,	186 12		
		" Debits,	52 81		133 31
13	Field L,	Amount of Credits,	22 00		
		" Debits,	4 62		17 38
12	Wood Lot M,	Amount of Credits,	207 10		
		" Debits,	123 56		83 54
13	Boarding Stock,	Amount of Credits,	109 28		
		" Debits,	96 00		13 28
		Amount of Loss and Gain,		510 91	2107 85
1	James Earl,	For net gain,		1596 94	
				2107 85	2107 85

This amount carried to the credit of James Earl's account, will show his present worth to be the same as in the general statement of avails and liabilities.

Dr.

JAMES EARL.

Cr.

1857.			1857.				
April	1	Liabilities as per Inv.,	285 00	April	1	His Avails as per Inv.,	8633 95
				1858.			
				March	31	Gain, Profit and Loss Acct.,	1596 94

THIS WORK AS A SCHOOL BOOK.

An objection to the introduction of this work as a School Book, may seem to exist in the fact that the system is here applied to farming operations only.

To this it is answered, that all other works on Book-Keeping are in like manner applied almost *wholly to the business of the merchant*. And furthermore, that the principles common to all accounts may be learned much more readily from this system, than from those applied to mercantile accounts; inasmuch as they are all herein contained, and more fully elaborated and applied to a greater variety of accounts—and the young farmer, acquainted with this system, may enter the counting room of the merchant and keep his books more successfully than the merchant's clerk can keep those of the farmer.

MODIFICATIONS.

Modifications of the general system exhibited in this work, may sometimes be desirable to adapt it to particular circumstances.

On farms where several teams are used, a general Ledger account for the whole, will be more convenient than a separate one for each. To this end, number the teams in order, and let the Time-Table be extended in the columns for totals of team work, so that there shall be one for each team—and number the columns to represent these respectively—at the close of the day, let the Labor and Team work be entered to the debit of the fields, &c., and to the credit of the teams.

The Ledger Account for Teams should be ruled on the Debtor and Creditor sides with parallel rulings corresponding to the number of teams, after the manner of the Produce Accounts.—When the Time-Table is posted and also the Day-Book entries for Feed and charges, the account will exhibit, as in the example following, the comparative state of each team and the entire result of the whole.

The grain fields, the pasture fields and the grain crops may be treated in like manner, and thus the Ledger accounts will be condensed and reduced in number. Dairy Account may be credited with Milk, Butter and Cheese, and separate columns ruled for each, or the whole may be estimated according to the proportionate value of the principal product.

Fattening Stock, and Breeding Stock Accounts are kept in the same manner as any other Stock Account, and require no further illustration. If a number of cattle are fed and it is desirable to know the particulars in regard to the different kinds, they may be classed and numbered, and so also with Brood Mares.

No Index is kept to this Ledger—as this was deemed unnecessary—the system on the most extensive farms cannot occupy more than 60 pages, and half that number is sufficient for ordinary farms. The reference from the Ledger to the Day-Book is by dates.

The retail credit system, whereby many farmers are continually anticipating the avails of their labors, and mortgaging their crops in dribblets here and there, is so injurious to their interests, that all recognition of it was purposely avoided in this work. Better sell stock or give a permanent mortgage at once, at any rate of interest, than pay the cost and penalties connected with this system. But those who wish such accounts, have examples of the manner of keeping them, in the *personal accounts* of this Ledger.

Dr.

GRAIN AND HAY FIELDS.

			Field H. Wheat.	Field C. Barley.	Field D. 2 Corn.	Field J. Oats.	Field K. Hay.	Field F. Hay.	Amount.
1857.									
April	1	Crops, &c., as per Inv.,	108 30	54 00	72 00				234 30
Nov.	30	Debits to this date,	55 75	20 70	133 38	108 25	31 25	34 00	383 33
1858.									
March	31	" "	62 25						62 25
"	..	Interest on Value,	22 40	14 00	14 00	22 40	21 56	20 16	114 52
"	..	Gain, Profit and Loss,	303 55	83 55	73 82	53 35	133 31	122 84	770 42
			552 25	172 25	293 20	184 00	186 12	177 00	1564 82

Dr.

TEAM ACCOUNT.

			H. Team, No. 1.	H. Team, No. 2.	Ox Team No. 1.	Ox Team No. 2.	Amount.
1857.							
April	1	Value as per Inv.,	250 00	225 00	120 00	110 00	705 00
"	30	Feed for the month,	12 50	12 50	12 00	12 00	49 00
"	..	Shoeing,	2 50	2 50			5 00
May	31	Feed for the Month,	13 00	13 00	11 50	11 50	49 00
June	30	" "	12 00	12 00	8 00	8 00	40 00
July	31	" "	11 00	11 00	8 00	8 00	38 00
Aug.	..	" "	10 50	10 50	8 50	8 50	38 00
"	..	Shoeing,	75	75			1 50
Sept.	30	Feed for the Month,	12 00	12 00	9 25	9 25	42 50
"	..	Interest on Value,	8 75	7 88	4 20	3 85	24 68
"	..	Gain as per Profit and Loss,	39 00	39 37	30 43	27 40	136 20
			372 00	346 50	211 88	198 50	1128 88

PRACTICAL RULES FOR MEASURING GRAIN, CISTERNS,
LOGS AND CATTLE.

2150 cubic inches make one U. S. standard bushel. For practical purposes, a foot is to a bushel, as 4 is to 5. Therefore, to convert feet into bushels, multiply by 4 and divide by 5.

EXAMPLE:—A bin is 8 feet long, 4 feet wide, and $3\frac{1}{2}$ deep. How much grain can it hold?

Solution:— $8 \times 4 \times 3\frac{1}{2} = 112$, the number of feet, and $112 \div 5 = 22.4$ bushels. Answer.

To find the contents of a pile of grain on the floor. Make the pile in the form of a pyramid or cone, and multiply the area of the base by $\frac{1}{3}$ of the height.

To find the area of the base, if it is rectangular, multiply the length by the breadth; if round, multiply the square of the diameter, by the fraction .7854.

EXAMPLE:—A conical pile of grain is 10 feet in diameter, and 5 feet high. How many bushels does it contain?

Solution:—10 squared is 100, and $100 \times .7854 = 78.54$, and $78.54 \times \frac{1}{3} = 26.18$, the number of cubic feet, and $26.18 \div 5 = 5.24$ bushels.

To find the amount of boards that can be made from a log; multiply the diameter in inches of the small end, by $\frac{1}{2}$ of the diameter, and the product, multiply by the feet in length, and divide the product by 12.

EXAMPLE:—A log is 30 inches in diameter, and 16 feet long; How many feet of board will it make? (See opposite page)

GRAIN AND HAY FIELDS.

Cr.

			Field H. Wheat.	Field C. Barley.	Field D, 2 Corn.	Field J. Oats.	Field K. Hay.	Field F. Hay.	Amount.
1857.							156 00		156 00
July	4	Harvested as per D. B.,							175 00
Aug.	4	" "						175 00	760 00
Sept.	..	" and Thresh. out,	460 00	156 00		144 00			72 50
"	..	" Fodder,	30 00	15 00		27 50			293 20
Oct.	31	" as per Day-Book,			293 20				
1858.									
March	31	Credits for Pasture,		1 25		12 50	30 12	2 00	45 87
"	..	Value as per Inv.,	62 25						62 25
			552 25	172 25	293 20	184 00	186 12	177 00	1564 82

TEAM ACCOUNT.

Cr.

			H. Team, No. 1.	H. Team, No. 2.	Ox Team No. 1.	Ox Team No. 2.	Amount.
1857.							
April	30	Work, as per Time-Table,	18 00	18 00	15 00	14 25	65 25
May	31	" "	19 00	19 50	15 38	15 00	68 88
June	30	" "	20 00	20 00	15 00	14 25	69 25
July	31	" "	21 00	20 50	15 75	15 00	72 25
Aug.	..	" "	22 00	21 50	15 75	15 75	75 00
Sept.	30	" "	22 00	22 00	15 00	14 25	73 25
"	..	Value, as per Inv.,	250 00	225 00	120 00	110 00	705 00
			372 00	346 50	211 88	198 50	1128 88

Solution;— $30 \times 15 = 450$, which multiplied by 16, and divided by 12, gives 600 feet, *Answer*.

To ascertain the weight of cattle while living:

Multiply the girth in feet, by the length on the back, from the bone of the tail which plumbs the hinder part of the buttock, to the fore part of the shoulder blade, and multiply the produce by 31 when the animal measures more than 7, and less than 9, feet in girth, and by 23, when less than 7, and more than 5; by 16, when less than 5 and more than 3; by 11, when less than 3.

EXAMPLE:—Girth of Ox 6 feet 4 inches, length, 5 feet 3 inches which multiplied together gives 31 superficial feet, and multiplying that by 23, gives 713 pound, weight of beef.

This rule gives the 4 quarters, sinking the offal.

A deduction of one pound in 20 must be made for half fatted cattle, and 1 in 20 for cows that have had calves.

To measure a Cistern multiply the square of the diameter in inches by the fraction .7854, and the produce by the depth, and divide the result by 231, and the quotient will be the contents in gallons, which, divided by $31\frac{1}{2}$ gives the barrels.

EXAMPLE:—A Cistern is six feet in diameter, and ten feet deep: how much water will it hold?

Solution:—72 squared, is 5184, and that multiplied by .7854 gives 4071.5 nearly, which multiplied by 120, (the inches in depth,) gives 488580, which divided by 231, gives 2115 nearly, and that divided by $31\frac{1}{2}$, gives 67 barrels, and 9 gallons.

APPENDIX.

INFORMATION FOR THE FARMER.

COMPILED FROM VARIOUS AUTHORS, AND KINDLY FURNISHED FOR THIS WORK BY
MR. DAVID COWAN, DETROIT.

The design of Agricultural Chemistry is to investigate—

- 1st. The relations of vegetables to the air and soil in which they grow.
- 2nd. The relations of vegetables to animals.

Neither vegetables nor animals *create matter*, and as every portion of their structure is derived either from the air or from the soil, it is manifestly important to know the nature of the materials which, as food, enter into their composition.

Animals and plants are composed of fifteen simple substances, and in general, four of these build up nineteen-twentieths of their structure. The life, health, and growth, of vegetables are dependant upon three properties, the temperature and moisture of the air, the composition and temperature of the soil, and upon the presence of solar light.

The atmosphere is principally composed of two invisible gases called oxygen and nitrogen, in about the proportion of four-fifths of the latter, and one-fifth of the former; these are called simple bodies—being incapable of division or decomposition. Carbonic acid gas, a compound substance, consisting of two parts oxygen and one of carbon, is found to constitute about one-thousandth part of the atmosphere. Water also, in the form of an elastic fluid, exists in it, but so slightly united with the other elements, that a change of temperature produces a change in its proportions, while the nitrogen, oxygen and carbonic acid, preserve nearly the same proportions.

Nine-tenths of the food of vegetables is composed of—

Carbonic Acid—a union of Carbon and Oxygen.	
Water, “ Oxygen and Hydrogen.	
Ammonia, “ Hydrogen and Nitrogen.	

Carbon, Oxygen, Hydrogen and Nitrogen, are the organic elements of vegetables and animals, and in every 100 lbs. weight of all cultivated vegetables—dried—we have, by analysis:

From 40 to 50 lbs. of Carbon,		
“ 35 to 45 “ Oxygen,	} Organic Elements.	
“ 5 to 7 “ Hydrogen,		
“ 1-10 to 3 “ Nitrogen.		
“ 2 to 10 “ Ash, including Inorganic Elements.		

The composition of some important vegetables is given in the following table:

	CARBON. Lbs.	HYDROGEN. Lbs.	OXYGEN. Lbs.	NITROGEN. Lbs.	ASH. Lbs.
In 100 lbs. of Wheat,.....	46.1	5.8	43.4	2.3	2.4
“ “ Oats,.....	50.7	6.4	36.7	2.2	4.0
“ “ Wheat Straw,.....	45.4	5.3	38.9	.4	7.0
“ “ Oat Straw,.....	50.1	5.4	39.0	.4	5.1
“ “ Red Clover Hay,.....	47.4	5.0	37.8	2.1	7.7
“ “ Potato,.....	44.0	5.8	44.7	1.5	4.0
“ “ Turnip,.....	42.9	5.5	42.3	1.7	7.6
“ “ Yellow Peas,.....	46.5	6.2	40.0	4.2	3.1
“ “ Pea Straw,.....	45.8	5.0	35.6	2.3	11.3
“ “ Jerusalem Artichoke,.....	43.3	5.8	43.3	1.6	6.0

From the above table, it will be seen that Wheat obtains (per 100 lbs.) from Carbonic Acid, Water and Ammonia, 97.6 lbs., and only 2.4 lbs. from the earthy inorganic elements.

AVERAGE PRODUCE OF NUTRITIVE MATTER OF DIFFERENT KINDS FROM AN ACRE OF THE FOLLOWING CROPS:

	Bush. per Acre.	Lbs. Weight.	Woody Fibre. Lbs..	Sug. Starch. Lbs.	Gluten, &c. Lbs.	Oils or Fats. Lbs.	Saline Ingredients.
Wheat,	25	1503	225	825	150 to 220	30 to 60	30
Oats,	40	1700	340	850	230	95	60
Barley,	35	1800	270	1050	216	45	36
Corn,	30	1800	270	900	216	90 to 170	27
Peas,	15	1600	130	800	380	45	45
Potatoes,	6 Tons.	13500	675	1620	300	45	120
Turnips,	20 "	45000	1350	4500	540	130	400
Carrots,	25 "	56000	1680	5600	840	200	560
Meadow Hay,	1½ "	3400	1020	1360	240	70 to 170	220
Clover Hay,	2 "	4500	1120	1800	420	135 to 225	400
Drumhead Cab'ge,	20 "	4500			1500		

Woody fibre, starch, sugar and gum, are composed of carbon, hydrogen and oxygen, united in almost identical proportions—the same weights of the same substances differently conjoined! Gluten and vegetable albumen appear to be as closely related as starch and sugar; they consist of the same elements united in the same proportions—carbon, hydrogen, oxygen and nitrogen.

The ash contains the inorganic elements of plants, and though these enter into their composition in very small proportion, there is no longer any room for doubt that they are essential parts of their substance; without them they cannot live a healthy life, or perfect all their parts; and it is as much the interest of the husbandman to supply these inorganic substances when they are wanting in the soil, as it is to place within the reach of the growing plant, those decaying vegetable matters which are most likely to supply it with organic food.

Before any solid can enter into the composition of vegetables, it must be in a state of solution. The solids contained in solution, which enter into the structure of plants, are ten—Sulphur, Potash, Phosphorous, Soda, Lime, Magnesia, Iron, Flint, Chlorine and Iodine.

TABLE OF MINERAL SUBSTANCES TAKEN FROM THE SOIL BY VARIOUS CROPS GROWN UPON AN ACRE RESPECTIVELY. (BY BOUSSINGAULT.)

	Dry Crops.	Ashes. per cent.	Ashes. Lbs.	Phos. Lbs.	Sulph. Lbs.	Chlorine. Lbs.	Lime. Lbs.	Magne- Lbs.	Potash Lbs.	Silicia. Lbs.	Ox. Iron. Lbs.
Potatoes,	2823	4.0	113	13	8.0	3.0	2	6	58	6	17.0
Beet Roots,	2908	6.3	183	11	3.0	9.0	13	8	82	15	4.75
Potato Tops,	5042	6.0	303	33	7.0	4.0	7	5	135	39	16.0
Wheat,	1052	2.4	25	12	0.3	—	0.8	4	7	0.4	—
Wheat Straw,	1558	7.0	179	5	1.5	1.0	15	9	17	121	1.75
Oats,	975	4.0	39	6	0.4	0.2	12	3	5	21	0.6
Oat Straw,	1176	5.1	60	1.5	2.5	3.0	5	15	17	24	1.0
Clover,	3693	7.7	284	18	7.0	7.0	70	18	77	15	0.9
Peas,	915	3.1	28	8	1.2	0.3	3	3	10	0.6	—
Beans, (Horse),	1944	3.0	58	20	0.75	0.5	3	5	26	0.3	—

The above and following table will show the farmer the necessity of a judicious rotation of crops. In 100 lbs of the ash of the following vegetables, the proportion of Potash and Soda, Lime and Magnesia and Flint are given under their respective heads:

		Potash and Soda.	Lime and Magnesia.	Flint.
FLINT PLANTS, -----	{ Oat Straw and Seed, -----	34 lbs.	4 lbs.	62 lbs.
	{ Wheat Straw, -----	22 "	7 "	61 "
	{ Barley, Straw and Seed, -----	19 "	25 "	55 "
	{ Rye Straw, -----	13 "	16 "	64 "
LIME AND MAGNESIA PLANTS, ----	{ Tobacco, -----	24 "	67 "	8 "
	{ Pea Straw, -----	28 "	64 "	8 "
	{ Potato Stalks, -----	4 "	59 "	36 "
	{ Clover, -----	39 "	56 "	5 "
POTASH AND SODA PLANTS, -----	{ Indian Corn, -----	71 "	6 "	18 "
	{ Turnips, -----	82 "	18 "	0 "
	{ Beets, -----	88 "	12 "	0 "
	{ Potatoes, (Tubers), -----	85 "	14 "	0 "

NOTE.—The highest numbers enclosed, show the predominant article in the composition of each plant.

Observe that Hay partakes of the character of the three classes.

An acre of Clover abstracts from	70 to 90 lbs. of Lime.
" " Hay, "	30 to 50 " "
" " Wheat Straw abstracts from	15 to 20 " "
" " Oat Straw,	10 to 18 " "

From an acre, a good crop of Wheat will abstract, in the straw alone, from 120 to 150 lbs. of Flint.

An acre of Oats, Seed and Straw, " "	40 to 60 " "
" Mangel Wurtzel and Beets, " "	12 to 18 " "

Of Potash, Soda and Magnesia—An acre of	Clover abstracts from	90 to 100 lbs.
“ “	Beet Root and Mangel Wurtzel,	80 to 100 “
“ “	Potato Tops,	130 to 150 “
“ “	Of grain and Straw of Wheat,	30 to 50 “

MANURES.

<i>In a ton of fresh Horse Manure are—</i>	<i>Comparison of Manures.</i>
400 lbs. of Vegetable and Animal Matter.	Farm yard Manure being taken as equal to 100 lbs.
40 “ Flint.	Solid Cow dung, “ “ 125 “
7 “ Potash.	“ Horse “ “ “ 73 “
1½ “ Soda.	“ Pig, “ “ “ “ 63 “
¾ “ Iron.	“ Sheep, “ “ “ “ 36 “
3 “ Lime.	“ Pigeon, “ “ “ “ 5 “
2 “ Magnesia.	Cow Urine, “ “ “ “ 91 “
4 “ Phosphorus.	Horse “ “ “ “ 16 “
¾ “ Sulphur.	Fresh Bones, “ “ “ “ 7½ “

NOTE.—Thus it will be seen that 73 lbs. of horse dung is as good as 125 lbs. of cow dung. Also, that 16 lbs. of horse urine is as valuable for manure as 91 lbs. of cow urine; but observe that a cow voids over 20 lbs. in a day, and a horse 3 lbs. a day.

In 1000 lbs. of horse urine are 45 lbs. of soluble saline and mineral ingredients, and 31 lbs. of a substance called urea, which resolves itself into Carbonic Acid and Ammonia. In 1000 lbs. of the urine of the cow are—of the saline and mineral ingredients, 43 lbs., and of urea, 18 lbs. A horse will void about 3 lbs. urine in a day, which, from November to March, will be about 450 lbs.—containing 14 lbs. urea, and 20 lbs. of soluble solids, which is worth 200 lbs. guano. A cow void from 20 to 40 lbs. urine in a day, and if we take the lesser number for five months, we shall have 54 lbs. urea, and 130 lbs. of soluble solids, which are worth 500 lbs. guano. (Guano is worth from \$40 to \$50 per ton.)

In using urine as a top dressing for grass, it should be diluted with from 3 to 5 parts water; it may be collected in tanks and conveyed to the field in water carts, and if spread regularly over the pasture, it will yield from one-third to one half increase. Leached ashes is very valuable manure, as a top dressing on old pastures, especially upon clay soils; it breaks it up and renders it friable, by letting in the air, where it would otherwise be excluded, and causes it to yield its nutritious properties to the roots of plants. From 8 to 10 wagon loads to an acre would yield nearly 25 per cent. profit a year, for several years. Unleached ashes would give more than twice as much, but a few applications would render the soil perfectly barren. Ground bones are very valuable manure for cow pasture.

COMPARATIVE VALUE OF FOODS FOR CATTLE—MEADOW HAY BEING THE STANDARD.

	Water in 1000 lbs.	Nitrogen in 1000 lbs. of the undried article.	Theoretical Value.
Ordinary Meadow Hay,	110	11	1000
Fine quality “ “	140	13	980
Red Clover Hay, second year,	101	15	750
“ “ Cut in bloom, gr	750	16	8110
Wheat Straw,	200	8	4000
Oat “	210	8	3800
Pea “	85	18	640
Vetches cut in bloom, and dried into Hay,	110	11	1010
Drum Cabbage,	928	8	4110
Field Beet or Mangel Wurtzel,	878	2	5480
Carrots,	876	8	3820
Jerusalem Artichokes,	792	8½	3482
Potatoes,	659	8½	3190
White Peas, (dried),	86	38	270
Oats,	208	17	680
Field Beans,	79	51	230
Swedes,	910	1 7-10	6700
Linseed Cake,	134	52	220

The above table informs us that 10 lbs. good Hay, equals, in nutritious properties, 67 lbs. Turnips—38 lbs. Carrots—31 lbs. Potatoes—54 lbs. Field Beets—6 8-10 lbs. Oats, or 38 lbs. of Oat Straw.

USUAL ALLOWANCE FOR A FARM HORSE IN TWENTY-FOUR HOURS.

Hay, 22 lbs.	or	Hay, 11 lbs.	or	Hay, 11 lbs.
Straw, 5½ “		Straw, 5½ “		Straw, 5½ “
Oats, 7½ or 1½ gals.		Oats, 7½ “		Oats, 7½ “
		Mangel Wurtzel, ... 44 “		Carrots, 40 “

100 lbs. Hay eaten by a horse, furnishes 170 lbs. manure. In consequence of the absorption of moisture after being eaten, and as dry food requires this moisture before it can yield its nutriment, the importance of steaming or boiling it, is evident.

Vegetables change their taste, morning, noon and night; hence, we find that cattle will eat certain kinds of vegetables in the morning, which they will not touch at noon, or in the evening; because, in the morning, vegetables are acid; at noon, tasteless, and at night, bitter. The *cause* is, that plants absorb oxygen in the night, and liberate hydrogen during the day.

M I L K .

In 100 lbs. good cow's milk, are found—	When churned, 100 lbs. will yield—
87 lbs. Water.	3 lbs. of Butter.
$4\frac{8}{10}$ " Sugar of Milk.	8 " Cheese, (cottage.)
3 1-6 " Oil and Fat, (Butter.)	12 " Buttermilk.
$4\frac{1}{2}$ Nitrogen principles, (Curd and Flesh.)	77 " Whey.

Hence in feeding a calf, it will gain over 2 lbs. a day, milk being the perfection of food.

A good milch cow will, if well fed with a mixed ration of hay or cut straw, and some roots thrown down before her, yield milk from 260 to 300 days, and give an *average* of 10 to 12 pints a day.

By means of chemistry, we are enabled to trace, with great accuracy, the purpose served by food in animals.

An ox, we will suppose, consumes a quantity of food, equal, in nutritious quality, to 40 lbs. of hay, besides a considerable quantity of water; 40 lbs. of Hay are composed of—

Water,	4 lbs.	Nitrogen Principles,	4 "
Woody fibre,	12 "	Oil or Fat,	$1\frac{1}{2}$ "
Sugar, Gum and Starch,	$15\frac{3}{4}$ "	Saline Ingredients,	$2\frac{1}{2}$ "
Total,			40 lbs.

The whole may be traced through the animal thus: A portion of the water is given off in the perspiration—another portion, together with undissolved substances, is ejected with the excrements—the dissolved sugar, starch and woody fibre serve to support respiration;—they are discharged from the body in the form of carbonic acid and vapor of water, by the lungs and skin. In a state of repose, a portion of the starch, sugar, gum and woody fibre, is converted into fat. The nitrogen principles are employed to form additional muscle or flesh. The combustible portions of the worn out particles of flesh are burned in the lungs and capillaries, and their nitrogen and saline compounds, are given off from the body in the form of urine. The oils and fat of the food serve two purposes: 1st. That of supporting respiration, and thereby the temperature of the blood. 2nd. That of assuming the form of animal fat. The saline ingredients replace the daily loss which takes place in the bones and juices of the flesh—the rejected substances being found in the urine.

The plant forms flesh—the animal appropriates it. The plant manufactures principles—the animal consumes them. The beautiful design of the opposite functions of animals and plants may thus be exhibited:

BALANCE SHEET OF NATURE.

THE VEGETABLE	THE ANIMAL.
Produces the Nitrogen Principles.	Consumes the Nitrogen Principles.
“ the Fatty Substances.	“ the Fatty Substances.
“ the Sugar, Starch and Gum.	“ Sugar, Starch and Gum.
Decomposes Carbonic Acid.	Produces Carbonic Acid.
“ Water.	“ Water.
“ Ammoniacal Salts.	“ Ammoniacal Salts.
Disengages Oxygen.	Absorbs Oxygen.
Absorbs Heat and Electricity.	Disengages Heat and Electricity.
Is an Apparatus of Reduction.	Is an Apparatus of Oxydation.
Is Stationary.	Is Locomotive.

PRACTICAL QUESTIONS ILLUSTRATING THE USE OF THE TABLES.

1st. How much provender is necessary for a span of horses from March 1st to July 1st, and what will be the cost? (See table of allowance.)

<i>Ans.</i> —Of timothy hay, 5368 lbs., at \$7 per ton,	-	-	-	-	-	-	-	\$18 79
“ Oat straw, 1342 “ 4 “	-	-	-	-	-	-	-	2 68
“ Oats, 53 3-16 bush., at 28c. per bush,	-	-	-	-	-	-	-	16 02
Total cost,	-	-	-	-	-	-	-	\$37 49

2nd. If I am scarce of hay, and have plenty of oats, how many oats must I allow a span of horses per day, and feed only 12 lbs. hay to each horse? *Ans.*—27½ lbs. or 3 2-3 gals.

3d. With 16 lbs. hay and 7½ lbs. oats, how much oat straw will supply the place of the 6 lbs. hay? *Ans.*—22 4-5 lbs. oat straw.

4th. My straw and hay will not hold out, but I have plenty of carrots; I must therefore feed out 14 lbs. hay, and 5½ lbs. straw. How many lbs. carrots must I feed each horse to make up for the 8 lbs. hay? *Ans.*—31 3-7 lbs. carrots, or 34 4-7 lbs. mangel wurtzel.

(OBSERVATION.—If a horse were accustomed to be fed with 33 lbs. of good hay per day, and afterwards wheat straw substituted for the hay, he would require 132 lbs. to give him the requisite nourishment; but he could not consume this in one day, so would fall away.)

5th. What should be the first care of the farmer?

Ans.—To secure a proper place to store the droppings of his stock—a hollow oval—with puddled or clay bottom. Such a one as would prevent the escape of the urine and the juices of the manure, and the ammoniacal gases.

6th. How may the gases be prevented from escape?

Ans.—By covering the dung heap with some convenient substance, such as loam, marl, clay, earth leaves, &c.

7th. Are the excrements, or the urine the most valuable manure?

Ans.—The urine.

8th. Should the manure be well decomposed before being applied to the soil?

Ans.—Yes. Because it then contains the same amount of nourishment in less bulk, and is more *easily assimilated* by plants.

9th. In what state should the land be, before the application of manure?

Ans.—It should be tilled to a proper depth, cleared of weeds, and drained if necessary.

10th. Whether is a drained clay soil, or one that is not drained, the warmer?

Ans.—A drained one—Because when a warm summer shower descends, it carries with it its heat, while it filters through the soil and leaves behind its valuable gases for the nourishment of the roots of the plants.

11th.—What would be a proper depth and shape for drains—how far apart should they be and how fall?

Ans.—From 3 to 4 feet deep—from 12 to 15 inches at top and from 4 to 6 inches at bottom—(main drain in proportion)—according to the nature of the soil—in a heavy clay soil they should not be more than 12 feet apart and filled to within 12 or 14 inches of the top.



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